



all tech is
human

RESPONSIBLE TECH GUIDE

PEOPLE
ORGANIZATIONS
IDEAS

*Ways for YOU to get plugged into the
Responsible Tech ecosystem*

How to Get Involved & Build a Better Tech Future



**The power of
community.**



**The power of collective
intelligence.**



**The power to change
systems.**



**The Responsible
Tech Guide is
designed for
people interested
in tackling
thorny tech &
society issues.**



Welcome to the Responsible Tech Guide

Get ready to discover a vibrant and diverse community that is deeply committed to building a better tech future. The Responsible Tech Guide, the flagship resource for our non-profit, is structured to allow you to quickly learn about the **people**, **organizations**, and **ideas** of the growing movement.

The Responsible Tech Guide is deceptively simple- in the pages that follow, you will learn about the people, organizations, and ideas related to the nascent ecosystem. Since our non-profit released the first version in September 2020, this guide has been widely read by students, academics, Trust & Safety teams, engineers, designers, entrepreneurs, policymakers and others who are looking to understand this rapidly-evolving movement and field.

By reading this guide, you'll find that the people involved in the Responsible Tech field come from a wide variety of backgrounds and perspectives. This guide is certainly not just for technologists! There is a melting pot of perspectives and disciplines in Responsible Tech.

This diversity is a desirable asset, not a drawback. The aim for our non-profit is to have an expanded ecosystem that promotes knowledge-sharing and collaboration. We can then better tackle wicked problems.

The complex issues surrounding tech necessitate multiple perspectives involved in the process. Given how much digital technologies impact us on an individual and societal level, it behooves us to have a field that is diverse, multidisciplinary, and aligned with the public interest. **Read away and get involved!**

The guide has been extremely useful in my personal career planning because of the number of interviews showcasing Responsible Tech leaders. Seeing the diverse and unique career paths of the featured leaders gave me more confidence in approaching the Responsible Tech Field in a way that preserved my own unique combinations of interests and passions. Additionally, the guide helped me learn about different organizations in the space and better understand the sub-fields which also helped me plan my future career steps.

The Responsible Tech Guide is designed to assist a broad range of individuals and organizations working to build a better tech future.

First released in September 2020, the Responsible Tech Guide has quickly become the go-to resource to understand the nascent Responsible Tech ecosystem, discover hundreds of resources from social purpose organizations across the globe, and read insight we have gathered from interviewing hundreds of individuals, interacting with our community of thousands of people from across sectors and experience levels, and receiving a significant amount of feedback in our various programs.



ANKITA JOSHI, AUTONOMOUS VEHICLE SAFETY ENGINEER

Table of Contents

Entering Responsible Tech

- 11** Multidisciplinary Map
- 12** Responsible Tech values
- 13** Welcome to All Tech Is Human
- 15** Happenings since our last version
- 17** 10 Ways to get involved
- 20** 10 Ways All Tech Is Human can help
- 28** 70 Responsible Tech books to read
- 31** What we're learning
- 36** Our range of activities

Expanding Your Knowledge

- 40** Career interviews
- 116** Education journeys
- 129** Responsible Tech organization list
- 175** University institutes & centers
- 193** Community interviews
- 239** Changemakers

Learnings

- 280** Key takeaways
- 281** Building community
- 283** Stay in touch

PLEASE NOTE: The Responsible Tech Guide's content and/or perspectives are that of the individuals quoted, and may not necessarily represent the opinions and viewpoints of All Tech Is Human. One of our roles as an organization is to showcase a range of perspectives throughout the Responsible Tech community.

Please reach out to hello@alltechishuman.org for any suggestions or improvements.





TRISHA PRABHU, ANTI-HATE ACTIVIST,
INVENTOR AND FOUNDER & CEO AT RETHINK

“ The anti-cyberbullying space - and the Responsible Tech space more broadly - definitely needs more youth voices. Because so many of the Internet’s harms - including cyberbullying - disproportionately affect youth, soliciting their perspectives not just in research, but as part of decision-making and solution creation is key. ”

“ The responsible tech field is exciting and still relatively new — and there is no one path to landing a career in this space. One practical piece of advice I’d give students is to take the time to explore and understand the backgrounds of those already working in this space. Consider how your interests could be a good match for this work, and what skills and experiences you can pick up to strengthen your credentials in this space. ”



RACHEL GILLUM, VICE PRESIDENT, ETHICAL AND
HUMANE USE OF TECHNOLOGY AT SALESFORCE



“ I think the tech space is slowly getting more diverse now in terms of people and discipline. I am very hopeful that meaningful participation from diverse communities at all levels such as education, practice, research, and policy with co-creative design justice principles would pave a path for just tech futures. ”

SIVA MATHIYAZHAGAN, ASSOCIATE DIRECTOR
OF SAFELAB, UNIVERSITY OF PENNSYLVANIA



NINA JANE PATEL, VP OF METAVERSE RESEARCH
AT KABUNI

“ We need to consider how we integrate transformative technology into the lives of children and young people today, at this nascent stage. Otherwise, we are doing CYP a disservice and not adequately innovating to meet their needs. How can we innovate for long-term benefit to design hardware, software and content to elevate life? ”

“ The governance of technologies needs to be more proactive and broader than it is now. AI ethics is getting a lot of play today, and that's a good thing, but quantum computers, blockchain, AR/VR, and more technologies will increasingly be developed and deployed on the unsuspecting masses. ”



REID BLACKMAN, CEO OF VIRTUE & AUTHOR OF
ETHICAL MACHINES



AMIRA DHALLA, DIRECTOR, IMPACT
PARTNERSHIPS AND PROGRAM (PRIVACY AND
SECURITY) AT CONSUMER REPORTS

“ A better tech future depends on the people. Whether it is people combining power to create movements that improve technology for everyone, or it is individuals who are developing new technology to address the harms others have felt. I'm optimistic in people's abilities to hold each other and the systems accountable. ”

To be multidisciplinary in our approach should be to give more value to human systems alongside technical ones. Often we turn to technical solutions to problems that could more easily be resolved by working on human practices.

We had a passionate group of 20 individuals from various backgrounds and disciplines in our Responsible Tech Summer Cohort that worked on this revision, building on the earlier work of our community.

A big thank you to: Adaku Nwakanma, Alexandra Krawetz, Andrew McAdams, Brian Policard (They/He), Carissa Anderson, Daniela Duta, Duduetsang Mokoete, Elisa Fox, Grace Volante, Gwyn Glasser, Leah Farrar, Leigh Yeh, Lili Siri Spira, Lisa Hehnke, Mayowa Ogunrinola, Nividha Jadeja, Rachel Wang, Robyn Lyn, Tiberiu Toca, and Tsz Wing Li

We asked the summer cohort: ***How does the narrative need to change in the responsible tech space?***



GWYN GLASSER, FELLOW AT AI CORE /
CONTRIBUTOR AT FORHUMANITY



ADAKU NWAKANMA, PRODUCT DESIGNER

Positive change begins by ensuring that there is justice - across race, class, sex, and wherever there are inequalities - and it is more pertinent as our world becomes even more connected through technology. This means we need more advocates and people working to actualize a more sustainable future.

The communities disproportionately impacted by the negative externalities of unmitigated techno-solutionist world-views and systems need to be centered as the experts (as opposed to victims / data points / pro-bono consultants) most qualified to rewrite their own narratives and (re)design their own futures.



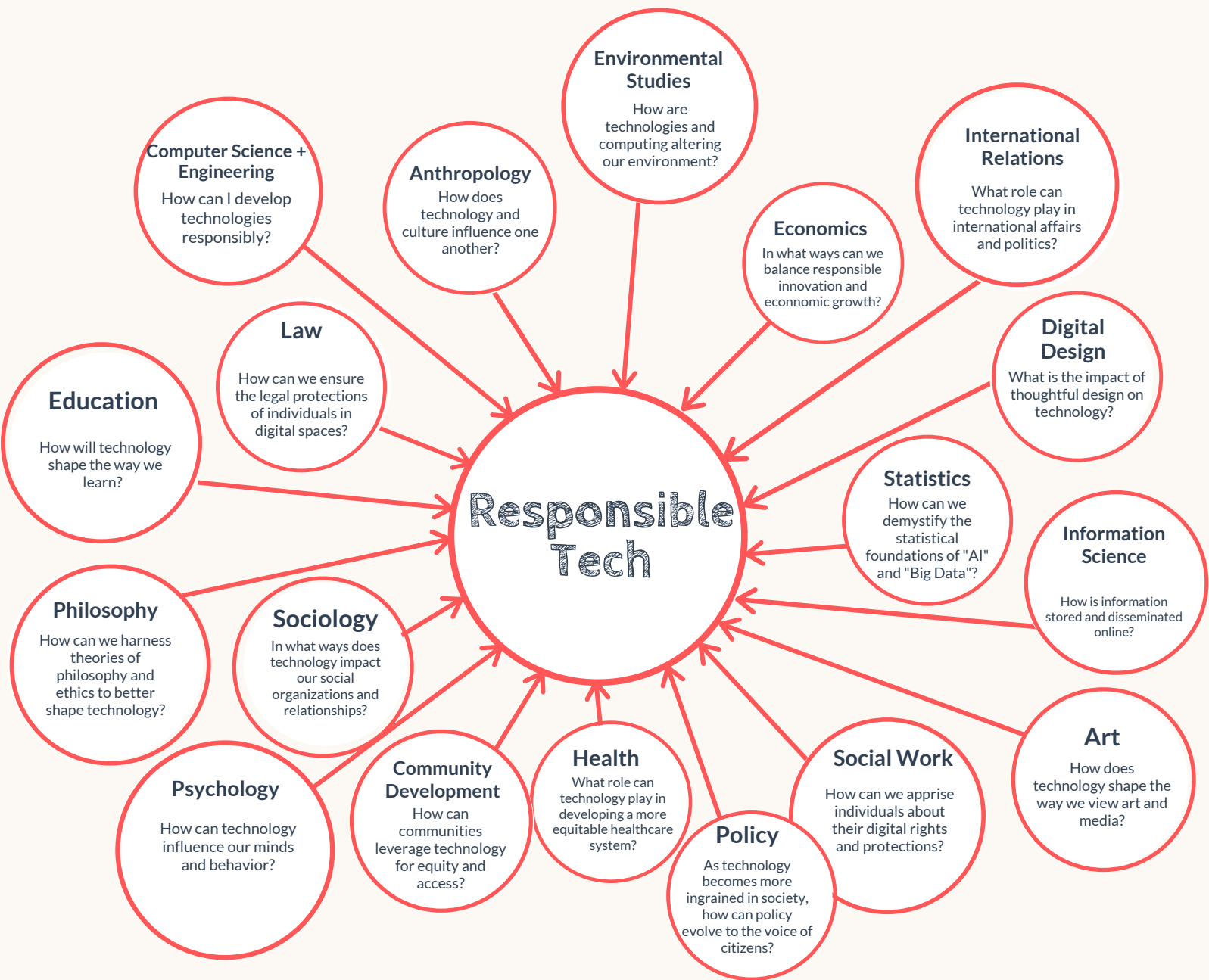
BRIAN POLICARD (THEY/HE), MIXED-MEDIA ARTIST, AND COMMUNITY ORGANIZER

I think the narrative should reflect that the responsible tech space is fluid and can mean different things to different people. There is no set definition so you need to create your own. This then creates a unique characteristic compared to other spaces in that your perspective is extremely important because you and only you can bring your perspective and experience.



ELISA FOX, PROGRAM ASSISTANT AT OBSERVER RESEARCH FOUNDATION AMERICA

The future of technology is the future of democracy and the human condition. We need all backgrounds involved.



Diversity breeds Responsible Innovation. The more perspectives we have involved in the process of technology development & deployment, the better. Incorporating a diverse range of backgrounds better surfaces unintended consequences, negative externalities, and how technology impacts a variety of groups differently. In order to align technology with the public interest, we need more of the public involved.

In order to tackle thorny tech & society issues, we must create a conducive environment and robust ecosystem



Let's co-create a better tech future.

I have some good news and I have some bad news. Let's start with the bad news.

Technology creates a host of knotty problems—such as determining appropriate speech on social media platforms, ensuring that artificial intelligence respects our human rights and doesn't reinforce stereotypes, and shifting business incentives that often run counter to our interests as individuals and as a society. It is clear that the future of technology is intertwined with the future of democracy and the human condition, but collectively we are often incapable of weighing trade-offs, understanding community values, and leveraging the intelligence of multiple stakeholders and disciplines to chart a path forward that is more aligned with the public interest.

The good news is that there are thousands of individuals from all backgrounds across the globe that are coming together to dedicate their lives to tackling these thorny issues.

This is where All Tech Is Human comes in, and the Responsible Tech Guide that you are reading. While simple on the surface, our guide lays out the people, organizations, and ideas of the nascent Responsible Tech movement in order to move toward a more cohesive and expanded ecosystem that is capable of tackling thorny tech and societal issues. By showcasing the vibrant community and the broad range of impactful organizations and inspiring leaders, it is our goal to promote greater knowledge-sharing and collaboration. By laying out new careers in the field and how to get one, our aim is to diversify the traditional tech pipeline with more backgrounds, disciplines, and lived experiences.

In other words, we view the wicked problems facing us through a social lens—not a tech lens. Our work, including this guide, is focused on shifting us away from the problem stage (we know there is a problem) to the solution stage that is vexing society right now.

Let's do this, together,

David



DAVID RYAN POLGAR
Founder & Director of All Tech Is Human
New York, New York
David@AllTechIsHuman.org





All Tech Is Human is a non-profit committed to co-creating a tech future aligned with the public interest. Based in New York City with a global audience and lens, we have a wide-range of activities focused around three key workstreams: **multi-stakeholder convening & community building**, **multidisciplinary education**, and **diversifying the traditional tech pipeline** with a broad range of backgrounds and lived experiences. This holistic, multi-prong approach allows us to grow and support the overall Responsible Tech ecosystem and movement around community values. You can find all of our projects [here](#), and view an overview of our organization [here](#).

MULTISTAKEHOLDER CONVENING

Community Slack group

Summits & mixers

Multi-sector working groups

MULTIDISCIPLINARY EDUCATION

Community reports

University ambassadors

Livestream series

DIVERSIFYING THE PIPELINE

Responsible Tech Guide

Job Board & talent pool

Mentorship Program

Our organization has been busy mapping, connecting, and expanding the nascent Responsible Tech movement since our founding in 2018. Our wide-range of activities gives us a deep connection with thousands of individuals from different backgrounds and sectors, allowing us to develop an intimate understanding of the evolving ecosystem.

All Tech Is Human has been busy since the last update of the Responsible Tech Guide

Responsible Tech Summit 2021 (Online). A unique gathering for those focused on reducing the harms of technology, diversifying the tech pipeline, and ensuring that technology is aligned with the public interest. On September 15, 2021, we held an online gathering for 1222 registered attendees from 60 countries that are committed to co-creating a better tech future!

We held a **Responsible Tech Mixer** (Online) on October 20, 2021, followed by an in-person **Responsible Tech Mixer** in NYC on November 17, 2021.

On December 1, 2021, we held our very first **Responsible Tech University Summit**. Some of our most passionate advocates for a better tech future are college students, recent grads and PhD students, and this summit also worked in learnings from our Responsible Tech University Ambassadors program.

Responsible Tech Mixer (In-person). We held a mixer in Washington, DC on March 2, 2022 in partnership with Digital Void, along with hosting a panel conversation. This in-person mixer was quickly followed up by an online mixer held on March 16.

Tech Policy Around the World (in-person). In collaboration with the Tony Blair Institute, All Tech Is Human held an in-person mixer in San Francisco at the Internet Archive to convene global organizations and professionals who are passionate about an international tech policy community. The mixer, held on April 27, 2022, aimed to promote building a more ethical, diverse and functional tech world.

On May 12, 2022, All Tech Is Human held a **career fair** alongside Stanford, Pepperdine, and University of Washington with support by New America's Public Interest Technology University Network to connect students and recent grads with hiring managers looking to fill public interest technology roles.

Responsible Tech Summit: Improving Digital Spaces (in-person & livestream). On May 20, 2022, All Tech Is Human held a day-long multi-stakeholder summit at the Consulate General of Canada in New York, with speakers coming from five different countries, to discuss ways to improve digital spaces.

Some highlights since we released our last Responsible Tech Guide

- All Tech Is Human held an in-person **mixer** in NYC on June 6, 2022 at the digital marketing agency imre to explore, "What would a human-centered metaverse look like?"
- **AI & Human Rights Report** released. All Tech Is Human marked their release of our AI & Human Rights report with this livestream on June 13, 2022. The report, led by team members Cate Gwin and Dr. Karina Alexanyan, with noted AI Ethicist Renée Cummings, brought together 70+ global contributors to examine opportunities and challenges related to the intersection of AI and Human Rights. In addition to building upon best practices explored from previous reports and multilateral organizations like the UN, the report includes 100+ organizations related to AI and Human Rights, the viewpoints of the contributors, and 43 profile interviews representative of industry, academia, and NGOs.
- **Youth, Tech, and Wellbeing** (in-person) All Tech Is Human held a panel and mixer in Washington, DC at the Australian Embassy, focusing on Youth, Tech, and Wellbeing. The panel brought together various stakeholders, including organizational leaders, youth advocates, researchers, Trust & Safety professionals, and mental health professionals to promote knowledge-sharing and collaboration to help build a better tech future for youth.
- **Tech & Democracy Mixer** (in-person). In collaboration with the Institute for Security and Technology and TheBridge, All Tech Is Human held a mixer in NYC for the community to explore careers at the intersection of tech and democracy.
- **Responsible Tech Guide Release Party**. To celebrate the release of our flagship resource on September 13, 2022, our organization is presenting a discussion with Rob Reich and Mehran Sahami, Stanford professors and co-authors of *System Error: Where Big Tech Went Wrong and How We Can Reboot* in NYC as part of A Species Between Worlds.
- We also held **multiple livestreams** on topics such as Responsible Tech & Imposter Syndrome and Exploring Careers in Responsible Tech.

10 WAYS TO GET INVOLVED IN THE RESPONSIBLE TECH FIELD TODAY

1

VOLUNTEER FOR AN ORGANIZATION

Find a Responsible Tech organization (see our list in this guide) that aligns with your values and the issues you find most pressing and conduct informational interviews, volunteer or intern there. Volunteering is a great way to not only support a cause, but also get your foot in the door.

2

NETWORK, NETWORK, NETWORK

Join an online affinity group, participate in a meetup, invite people you admire to coffee (yes, virtually). Many individuals with new and unique job roles centered on responsible innovation didn't just get the role because of their education and skills, but also their network. There are vibrant Responsible Tech communities on LinkedIn, Twitter, and our large Slack group.

3

FIND A MENTOR

Cultivate relationships with individuals you admire by starting email exchanges, virtual coffees, and other opportunities for conversation. Individuals in this growing field are accessible and also have a deep desire for more people to get involved. Find individuals doing work that you admire and reach out to them. All Tech Is Human runs a large mentorship program.

4

BE MULTIDISCIPLINARY AND CROSS-SECTOR

Digital technologies are not discipline specific! Demonstrating that you can translate complex ideas across audiences is a super power. The Responsible Tech space is home to non-linear career paths with a wide variety of experiences, leveraging an ability to think about issues such as networked technologies and emerging digital tools through a sociotechnical lens.

5

STAY CURIOUS

While this guide aims to provide an on-ramp to the Responsible Tech world, you could also set aside time each week to research the field and stay on top of trends. This field is rapidly evolving and expansive.

6

UPSKILL

Take advantage of the many free classes offered on the wide range of topics within the Responsible Tech field. Find the areas you have less experience with and fill in the gaps. Consider the ways that you can leverage your current skillset, while also complementing your gaps.

7

STAY CURRENT

Webinars, workshops, and listservs on specific elements of Responsible Tech are a great way to gain new knowledge. These resources contribute to a better understanding of the ecosystem and potential new contacts from the speakers and audience.

8

BE ENTREPRENEURIAL

Many of the individuals involved in the field have an entrepreneurial mindset to approaching new projects and collaborating. Is there an idea you have that is not being adequately explored? Start a project!

9

GET INSPIRED

It is easy to get overwhelmed when thinking about all of the complex issues in Responsible Tech. At the same time, there is a passionate community of people making major improvements to society's approach to technology. Read their books, listen to their podcasts, and get inspired.

10

PARTICIPATE

The Responsible Tech movement requires collaboration and crowdsourcing. Is there something we missed in this guide? Whether it is a person who should be featured, an organization creating valuable resources, or a toolkit everyone should know about, the future of the Responsible Tech movement depends on active collaboration and knowledge-sharing.

What issues have you had with growing in the Responsible Tech field?

“ Don't know much about it or where to find information. ”

“ Confidence with abilities, breaking into the field. ”

“ I'm new in the industry and this field seems to be difficult to get into if you're just starting. ”

“ Identifying valuable skills/knowledge for growth. ”

“ Gaining respect for non-technical experience. ”

“ Mentorship that is not unaffordable. ”

“ Aligning with business objectives / client priorities. ”

“ Limited opportunity for someone who is pivoting. ”

Common frustrations include discoverability, need for mentorship, difficulty on gaining needed initial experience, concerns that non-technical backgrounds are less respected, finding community outside of major hubs, understanding the landscape and desired skills, determining how to pivot one's career, and opportunities for upskilling.

What types of resources or activities do you find most helpful to growing in the field?

“ Hands-on, structured learning opportunities meant for someone with a non-tech background to hone their new-found skills. ”

“ Networking online and locally. Having free events like this that explain the idea and concepts behind responsible tech to educate people. ”

“ Having honest and transparent conversations with people who are either going through or who have overcome things the same things. ”

“ Networks and community to discuss and learn best ways to advocate for and infuse responsible tech in every role. ”

“ Connecting to interesting peers in the field and being able to personally exchange with one another. ”

When growing in the nascent Responsible Tech field, individuals regularly cite the importance of finding communities of support, attending online and in-person gatherings, staying abreast of the issues, studying the landscape to understand key players and organizations, and finding mentorship opportunities.

10 DIRECT WAYS ALL TECH IS HUMAN CAN HELP YOU RIGHT NOW

1 JOIN OUR COMMUNITY SLACK GROUP

Did you know we have over 3.6k members from across the globe on our community Slack group? Coming from all different backgrounds, career levels, and perspectives, our Slack group is a melting pot for the Responsible Tech movement! Join us at bit.ly/ResponsibleTechSlack

2 BE PART OF OUR MENTORSHIP PROGRAM

No matter where you are on in your career, our organized is designed to help! People entering the ecosystem need assistance from mid-career, and mid-career need help from senior level individuals.

3 ATTEND A RESPONSIBLE TECH MIXER

All Tech Is Human has been hosting both in-person (NYC, DC, SF, expanding elsewhere) and online Responsible Tech Mixers. These are are excellent opportunity to meet others that are deeply passionate about co-creating a better tech future, one aligned with the public interest.

4 READ OUR PREVIOUS REPORTS

In recent months, our organization has released *AI & Human Rights: Building a Tech Future Aligned With The Public Interest*, *HX Report: Aligning Our Tech Future With Our Human Experience*, and *Improving Social Media: The People, Organizations, and Ideas for a Better Tech Future*. Check them out!

5 JOIN AN OPEN WORKING GROUP

Our last report (AI & Human Rights) featured the contributions of over 300 people from across the globe from various disciplines and career levels! Our working groups are open and high participatory, and an excellent opportunity to strengthen your skills and deepen your network.

6 PARTICIPATE IN OUR SUMMITS & GATHERINGS

Our organization puts together impactful summits that draw a global audience across civil society, government, industry, and academia. Recent summits and gatherings have been held at the Australian Embassy in Washington, D.C. and the Consulate General of Canada in New York.

7 REGISTER FOR OFFICE HOURS

We are designed to activate interest! Schedule office hours with Program Associate Cate Gwin to find out options for you to get involved in our various activities and general ways to participate more in the Responsible Tech movement.

8 LEARN ABOUT ROLES WITH THE RESPONSIBLE TECH JOB BOARD

You have to first KNOW about a career in order to participate in it! Our organization has been busy illuminating newish careers and pathways for a broad range of backgrounds to get involved.

9 JOIN OUR RESPONSIBLE TECH TALENT POOL

Our newest initiative, the [Responsible Tech Talent Pool](#) is designed to surface opportunity matches based on your interest, location, and career level.

10 TAKE PART IN OUR LIVESTREAMS

Livestreams are an excellent way to not only hear about the latest topics, organizations, and Responsible Tech advocates, but is an ideal opportunity to join in the conversation and meet others who care about these issues as much as you do.



Topics in Responsible Tech

There is a wide range of topics to make yourself familiar with and to find the ones that align with your area of passion and concern.

TOPICS IN RESPONSIBLE TECH

DESIGN, INCLUSION, EQUITY, POWER

Accessibility
Affinity Groups
Anti-racist Technology
Civic Tech
Consent (in disclosure, etc.)
Criminal Justice Reform
Dark Patterns
Data Access
Data Equity
Data Feminism
Data Literacy
Design Justice
Digital Behavior Design
Digital Citizenship
Digital Colonialism
Digital Divide
Digital Footprint
Digital Human Rights
Diversity, Equity, Inclusion
Ethically Aligned Design
Future of Work
Future of Education
Fourth Industrial Revolution
Ghost Worker
Human-centered Design
Human-centered AI
Human Factors Engineering
Human Rights Impact Assessments
HX (Human Experience)
Inclusive Design
Privacy by Design
Power Asymmetries
Product Inclusion
Safety by Design
Surveillance
Stakeholder Engagement
Tech and Wellbeing
Tech Pipeline
Workers Rights

GOVERNANCE & ETHICS

Accountability
AI Bias
AI Explainability & Interpretability
AI in Governance & Outreach
Algorithmic Auditing
Algorithmic Bias
Algorithmic Harm
Cybersecurity (data security, information security)
Data Governance
Data Trusts
Data agency and data provenance
Dossiers and digital footprints
Ethics Theater
Ethics Washing
Ethics in foresight and prediction for decision-making
Fairness in AI/ML
Privacy
Regulatory Policy for AI
Robot Ethics
Singularity
Social listening ethics
Sustainability
Synthetic biology and genetics
Tech Equity
Tech Ethics
Transparency in AI/ML
Trust & Safety
Trustworthy or Responsible AI
VR Ethics

TOPICS IN RESPONSIBLE TECH

APPLICATIONS

AgTech
AI Chatbots
Applied AI
Autonomous Vehicles
Automated Decision Making Systems (ADMS)
Behavioral advertising
Black Box AI
Brain-Computer Interface (BCI)
Connected Infrastructure
Dynamic or Algorithmic Pricing
EdTech
Facial Recognition
FinTech
GovTech
HRTech
Image Recognition
Internet
IoT
Natural Language Processing (NLP)
Predictive Policing
Public Interest Technology
Recommendation Systems
Remote Worker Monitoring
Safety Tech
Scoring systems
Smart Cities
Voice Recognition

ONLINE MEDIA

Attention Economy
Circular Economy
Cyberbullying, Cyberhate
Content / Online Speech Moderation
Deepfakes
Digital Wellness
Disinformation
Echo Chambers
E-waste
Filter bubbles
Misinformation
Media Literacy
Polarization Online
Rabbit Holes
Section 230
Synthetic and Manipulated Media

Responsible Tech Jobs

All Tech is Human curates a unique and growing list of roles focused on reducing the harms of technology, diversifying the tech pipeline, and ensuring that technology is aligned with the public interest.

Here are a sample of 100 recent jobs postings from our [Responsible Tech Job Board](#), showcasing the range of roles across large tech companies, academia, startups, and civil society organizations. We also recently started a [Responsible Tech Talent Pool](#) you can freely join.

100 RECENT JOB POSTINGS IN THE RESPONSIBLE TECH FIELD FROM A-Z

Accenture - Metaverse Strategy Consultant - Responsible Innovation
ACLU - Fall 2023 William J. Brennan Fellowship, Speech, Privacy and Technology Project
Ada Lovelace Institute - Senior Researcher, Public Sector Algorithms
ADL's Center for Technology and Society - Tech & Society Research Fellow: Hate & Disinformation Online
Alan Turing Institute - Research Associate/Senior Research Associate, AI Standards
Amazon - Senior Program Manager, Offensive Content and Privacy
Amnesty Tech - Researcher, Technology and Inequality
Apple - Machine Learning Engineer, Trust and Safety
Aspen Digital - Project Director, Tech Equity Accountability Mechanism (TEAM)
Atlantic Council - Digital Forensic Research Lab, Deputy/Associate Director of Operations
BetaNYC - Civic Innovation Lab Director
Black in AI - Executive Director
Booz Allen Hamilton - Data Ethics and Privacy Professional, Senior
Brookings Institution - Assistant Director, Artificial Intelligence and Emerging Technology Initiative
Bumble - Technical Product Manager - Media Moderation, Trust and Safety
ByteDance - Tech Lead Manager, Machine Learning Fairness
Carnegie Mellon University - Data Science & Public Policy Lab, Senior Data Scientist
Center for AI and Digital Policy - Law Fellow
Center for Democracy & Technology (CDT) - Deputy Director, Privacy + Data Project
Center for Humane Technology - Humane Innovation Lead
Center for Responsible AI (New York University, Tandon School of Engineering) - Research Engineer
City of San Francisco - Journey Information Systems Engineer - Applications Specialty, Tech Hire Program
City of San Jose - Data Equity Lead (Assistant To The City Manager)
Common Cause - Field Coordinator, Stopping Cyber Suppression
Cornell Tech - Public Interest Tech (PiTech) Initiative Director
Credo AI - Tech Policy Product Manager
Cyber Collective - Social Media & Digital Experience Manager
Data & Society Research Institute - Director of Research
Deepmind - Ethics Research Scientist
Discord - Director of Product, Trust & Safety
Etsy - Senior Product Manager, Threat Mitigation
Ford Foundation - U.S. Technology and Society, Program Officer
Georgetown University, Beeck Center for Social Impact + Innovation - Program Manager, Data Labs
Georgetown University Law Center, Institute for Technology Law and Policy - Executive Director
Georgetown University McCourt School of Public Policy - Program Dir., Tech and Public Policy Program

100 RECENT JOB POSTINGS IN THE RESPONSIBLE TECH FIELD FROM A-Z

Global Internet Forum to Counter Terrorism (GIFCT) - Technology and Programs Associate
Google - Principal Engineer, Tech Lead, Responsible AI
Grammarly - Analytical Linguist, Ethical AI
Grindr - Escalations Specialist
Harvard Uni., Berkman Klein Center for Internet & Society - Program Dir., Rebooting Social Media
Hinge - Director of Product, Trust & Safety
H&M Group - Digital Ethics Lead
Hugging Face - Research Intern (Model Cards)
IBM - 2023 Intern – Responsible & Inclusive Technologies Sr Researcher
IKEA - Digital Ethicist
Indeed - Senior Data Scientist - AI Ethics
Integrity Institute - Research Project Manager
J.P. Morgan Chase - AI Researcher (Fairness) - Executive Director / Vice President / Sr. Associate
Just Futures Law - Senior Staff Attorney
Lego - Data Ethics Specialist
Mastercard - Manager, Data Strategy and AI Governance
Match - Product Manager, Trust and Safety
Meta - Data Protection Program Manager
Microsoft - Principal Research Product Manager - Privacy Preserving AI
MIT Governance Lab (MIT GOV/LAB) - Curriculum Designer (Governance Innovation)
National Democratic Institute - Program Director: Democracy and Technology
New America - Program Manager - #ShareTheMicInCyber
New York City Council - Data Scientist
NY Tech Alliance - Executive Director
Omidyar Network - Principal, Responsible Technology
OpenAI - Product Policy Manager
Parity - Senior User Experience (UX) Designer
Partnership on AI - Program Associate: Fairness, Accountability, Safety, and Transparency (FAST)
Patrick J. McGovern Foundation (PJMF) - Director, Strategy & Programs
Pfizer - Ethical AI and External Innovation Lead
PwC - Data, Privacy & Ethics - Data & AI Governance Sr Associate
Reddit - Senior Machine Learning Engineer, Safety Signals
Roblox - Senior Data Scientist, Trust & Safety - Account Integrity
Salesforce - Policy Operations Analyst / Sr Analyst, Ethical and Humane Use Policy

100 RECENT JOB POSTINGS IN THE RESPONSIBLE TECH FIELD FROM A-Z

Schmidt Futures - Director, Technology Services

Sky - Senior Data Ethics Analyst

Snap Inc. - Product and Customer Insights Manager, Product Inclusion

Sony AI - Research Scientist (Computer Vision and Algorithmic Fairness)

Spectrum Labs - Part-time Researcher and Language Consultant

Spotify - Machine Learning Research Scientist - Algorithmic Impact & Responsibility

Stanford Institute for Human-Centered Artificial Intelligence (HAI) - Research Associate

State of California - Chief Information Officer

Stripe - Machine Learning Engineer, Responsible Machine Learning

Surveillance Technology Oversight Project (S.T.O.P.) - Internships

Takeda - Privacy Officer APAC

TechCongress - Congressional Innovation Fellows

Tech Talent Project - Project Management Intern

The Hertie School, Centre for Digital Governance - Postdoctoral Researcher - Digital Governance

Thomson Reuters - Data & Model Ethics Senior Analyst, Standards & Principles

TikTok - Responsible Innovation Manager, Trust & Safety

Tony Blair Institute for Global Change - Partnerships Lead, Tech for Development

Twitter - Engineering Manager - Content Health (Child Safety)

UK Government, Department for Digital, Culture, Media and Sport - Policy Advisors, Centre For Data Ethics and Innovation

U.S. Bank - Fair and Responsible Banking Strategic Assessments and Reviews Specialist - (Model Review Focus)

U.S. Department of Defense - Chief, Responsible Artificial Intelligence Program

U.S. Dept. of Homeland Security, Federal Emergency Management System (FEMA) - Data Scientist

U.S. Digital Response - Economic Stability Program Co-Lead

U.S. Federal Trade Commission (FTC) - Technologist Hiring Program

U.S. General Services Administration (GSA) - Technology Transformation Services (TTS) - Presidential Innovation Fellows

University of California, Berkeley, School of Information - Postdoctoral Researcher in combatting disinformation

WarnerMedia, CNN Digital - Editor, Misinformation Beat

Workday - Machine Learning Trust Senior Program Manager

World Economic Forum, Centre for the Fourth Industrial Revolution Network (C4IR) - Lead, Artificial Intelligence & Machine Learning

YouTube - UX Research Manager for Youth Initiatives

Zoom - Lead Software Engineer (Backend) - Trust & Safety

70 RESPONSIBLE TECH BOOKS FOR YOU TO READ



AI by Design: A Plan for Living with Artificial Intelligence by Catriona Campbell

Algorithms and the End of Politics: How Technology Shapes 21st-Century American Life by Scott Timcke

Algorithms of Oppression: How Search Engines Reinforce Racism by Safiya Umoja Noble

The Age of AI: And Our Human Future by Henry Kissinger, Eric Schmidt, and Daniel Huttenlocher

The Age of Surveillance Capitalism: The Fight for a Human Future at the New Frontier of Power by Shoshana Zuboff

The Alignment Problem: Machine Learning and Human Values by Brian Christian

Artificial Unintelligence: How Computers Misunderstand the World by Meredith Broussard

Atlas of AI: Power, Politics, and the Planetary Costs of Artificial Intelligence by Kate Crawford

Behind the Mask of Facebook: A Whistleblower's Shocking Story of Big Tech Bias and Censorship by Kent Heckenlively, and Ryan Hartwig

Black Software: The Internet & Racial Justice, from the AfroNet to Black Lives Matter by Charlton McIlwain

Custodians of the Internet: Platforms, Content Moderation, and the Hidden Decisions That Shape Social Media by Tarleton Gillespie

Data Feminism by Catherine D'Ignazio, and Lauren Klein

Data Lives: How Data Are Made and Shape Our World by Rob Kitchin

Design Justice by Sasha Constanza-Chock

70 RESPONSIBLE TECH BOOKS FOR YOU TO READ

The Digital Closet: How the Internet Became Straight by Alexander Monea, and Violet Blue
The Digital Republic: On Freedom and Democracy in the 21st Century by Jamie Susskind
Dignity in a Digital Age: Making Tech Work for All of Us by Ro Khanna
Ethical Machines: Your Concise Guide to Totally Unbiased, Transparent, and Respectful AI by Reid Blackman
Ethics in an Age of Technology by Ian Barbour
Ethics in Technology: A Philosophical Study by Topi Heikkerö
Ethics in the AI, Technology, and Information Age by Michael Boylan, and Wanda Teays
The Ethics of Invention: Technology and the Human Future by Sheila Jasanoff
Everybody Wants to Rule the World: Surviving and Thriving in a World of Digital Giants by R. “Ray” Wang
Everyday Chaos: Technology, Complexity, and How We’re Thriving in a New World of Possibility by David Weinberger
The Exponential Age: How Accelerating Technology Is Transforming Business, Politics and Society by Azeem Azhar
Fake Accounts by Lauren Oyler
Freedom to Think: The Long Struggle to Liberate Our Minds by Susie Alegre
Future Ethics by Cennydd Bowles
Future Politics: Living Together in a World Transformed by Tech by Jamie Susskind
A Future So Bright by Kate O’Neill
Gender Inequalities in Tech-driven Research and Innovation by Gabriele Griffin
Hello World: Being Human in the Age of Algorithms by Hannah Fry
History, Disrupted: How Social Media and the World Wide Web Have Changed the Past by Jason Steinhauer
How to Do Nothing: Resisting the Attention Economy by Jenny Odell
Internet for the People: The Fight for Our Digital Future by Ben Tarnoff
Invisible Women: Data Bias in a World Designed for Men by Caroline Criado Perez
Lurking: How a Person Became a User by Joanne McNeil
Machine See, Machine Do: How Technology Mirrors Bias in Our Criminal Justice System by Patrick K. Lin
Made by Humans: The AI Condition by Ellen Broad
The Ministry for the Future: A Novel by Kim Stanley Robinson
Moralizing Technology: Understanding and Designing the Morality of Things by Peter-Paul Verbeek
Narrative and Technology Ethics by Wessel Reijers, and Mark Coeckelbergh
New Dark Age: Technology and the End of the Future by James Bridle
Out of Touch by Michelle Drouin

70 RESPONSIBLE TECH BOOKS FOR YOU TO READ

Power to the Public: The Promise of Public Interest Technology by Tara Dawson McGuinness and Hana Schank

Race After Technology: Abolitionist Tools for the New Jim Code by Ruha Benjamin

Radical Technologies: The Design of Everyday Life by Adam Greenfield

Reclaiming Conversation: The Power of Talk in a Digital Age by Sherry Turkle

Resisting AI: An Anti-fascist Approach to Artificial Intelligence by Dan McQuillan

Right/Wrong: How Technology Transforms Our Ethics by Juan Enriquez

Slow Computing: Why We Need Balanced Digital Lives by Rob Kitchin and Alistair Fraser

The Shame Machine: Who Profits in the New Age of Humiliation by Cathy O'Neil

Speech Police: The Global Struggle to Govern the Internet by David Kaye

System Error: Where Big Tech Went Wrong and How We Can Reboot by Rob Reich, Mehran Sahami, and Jeremy M. Weinstein

Team Human by Douglas Rushkoff

Technically Wrong: Sexist Apps, Biased Algorithms, and Other Threats of Toxic Tech by Sara Wachter-Boettcher

Technology and Society: Building Our Sociotechnical Future by Deborah G. Johnson, and Jameson M. Wetmore

Technology and the Virtues: A Philosophical Guide to a Future Worth Wanting by Shannon Vallor

Technology vs. Humanity: The Coming Clash Between Man and Machine by Gerd Leonhard

Technology Is Not Neutral: A Short Guide to Technology Ethics by Stephanie Hare

The Tech That Comes Next by Amy Sample Ward and Afua Bruce

This Is How They Tell Me the World Ends: The Cyberweapons Arms Race by Nicole Perloth

Throwing Rocks at the Google Bus: How Growth Became the Enemy of Prosperity by Douglas Rushkoff

Trampled by Unicorns: Big Tech's Empathy Problem and How to Fix It by Maelle Gavet, Megan Tusing, and Gildan Media

Twitter and Tear Gas: The Power and Fragility of Networked Protest by Zeynep Tufekci

Understanding Media: The Extensions of Man by Marshall McLuhan

Value Sensitive Design: Shaping Technology with Moral Imagination by Batya Friedman, and David G. Hendry

Weapons of Math Destruction: How Big Data Increases Inequality and Threatens Democracy by Cathy O'Neil

We Are Data: Algorithms and the Making of Our Digital Selves by John Cheney-Lippold

Women of Color in Tech: A Blueprint for Inspiring and Mentoring the Next Generation of Technology Innovators by Susanne Tedrick

SKILLS NEEDED TO WORK IN RESPONSIBLE TECH

The growth of the field of Responsible Tech is inspiring the emergence of a handful of multidisciplinary degree programs explicitly perched at the intersection of tech and society. At the same time, Responsible Tech is already a viable career path for those from many different educational backgrounds: those with traditional tech degrees like computer science, data science, information science, engineering, but also those with academic backgrounds from social sciences like sociology, anthropology, psychology, and from disciplines like UX design, human computer interaction, law, policy, and the arts and humanities.

Regardless of educational background and professional experience, there are relevant skills that pop up across the field of Responsible Tech, and **having a non-linear career path doesn't appear to be the exception in Responsible Tech, but the norm.**

A common skill among our interviewees is being able to bridge the gap between technical understanding and an appreciation of societal impacts. Some key themes that rose to the surface include **active listening, making sense of chaos/connecting dots, empathy, curiosity/asking questions to lead to discovering, relationship-building, and strong analytical skills.**

To illustrate, here are the skills desire for being a data ethicist:

- communication skills
- applied knowledge of social sciences
- stakeholder relationship management
- analysis and synthesis
- bridging the gap between the technical and non-technical
- product development
- empathy and inclusivity
- problem-solving
- facilitating decisions and risks

Data ethics skills focus on understanding society, the broader social and economic impacts of technologies, and the norms it helps to create and shape. This is distinct from data science, which focuses on specific project delivery aspects and technological capabilities, rather than their social implications.



NATALIA DOMAGALA, HEAD OF DATA AND AI ETHICS POLICY, UK CIVIL SERVICE

RESPONSIBLE TECHNOLOGY CAREER AND TALENT PIPELINE

Transforming the Responsible Technology talent pipeline to make it more diverse, multidisciplinary, and aligned with the public interest is a crucial component of co-creating a better tech future.

The homogenous sliver of society currently in the position to design, develop, and deploy the technologies that we use every day is failing to effectively and comprehensively navigate the complexities of these emerging technologies, leaving communities vulnerable to negative and unintended impacts.

Our theory of change involves increasing the discoverability of the growing number and types of available opportunities and facilitating participation from talent with a significantly wider variety of backgrounds, disciplines, and lived experiences. As the meta-connector for the people, organizations, and ideas of the Responsible Tech movement, All Tech Is Human is concerned with multi-stakeholder cooperation, bringing together talented job seekers alongside leading responsible technologists, practitioners, and hiring managers into one collaborative community.

We feature roles that are focused on reducing the harms of technology, diversifying the tech pipeline, and ensuring that tech is aligned with the public interest. We curate a list, updated daily, of hundreds of jobs, internships, and fellowships in fields like:

- Responsible or Ethical AI
- Public Interest Technology
- Online Trust & Safety
- Tech Policy
- Data Privacy
- Accessible & Human-Centered Design
- Digital Governance
- Youth, Tech, and Wellbeing
- Tech & Democracy

As Program Director for All Tech Is Human, I am focused on illuminating career pathways for responsible tech practitioners and aspirants within our growing community and on connecting these passionate individuals with impactful positions throughout the Responsible Tech ecosystem.



REBEKAH TWEED
PROGRAM DIRECTOR, ALL TECH IS HUMAN

LEARNINGS FROM OUR RESPONSIBLE TECH JOB BOARD

Rebekah Tweed first created the Responsible Tech Job Board in September of 2020 in an effort to curate into a single resource the many disparate opportunities that constellate our shared center of gravity – tackling the thorny issues at the intersection of tech and society. This job board has quickly grown into a go-to resource for both applicants and hiring managers to understand the evolving field of Responsible Tech.

We track roles across sectors, including:

- Academia
 - Responsible Tech-oriented Faculty
 - University-based Research Institutes
- Civil Society
 - Global NGOs
 - Non-profits
 - Think Tanks
 - Research Institutes
 - Philanthropic Foundations
- Government
 - Federal
 - State
 - Local
- Industry
 - Tech Industry
 - Other Industries: Finance, Textiles, Energy, Communication, Automotive, Pharmaceuticals, and more
 - Responsible Tech Startups
 - Global Consultancies

All Tech Is Human community member Lisa Hehnke created these data visualizations to provide a better understanding of the field of Responsible Tech through the lens of the roles that are available on the job board.

- Which sub-fields of Responsible Tech have the most available roles?
- What is the distribution of experience levels from internships and fellowships to early career, mid-career, and senior level roles?

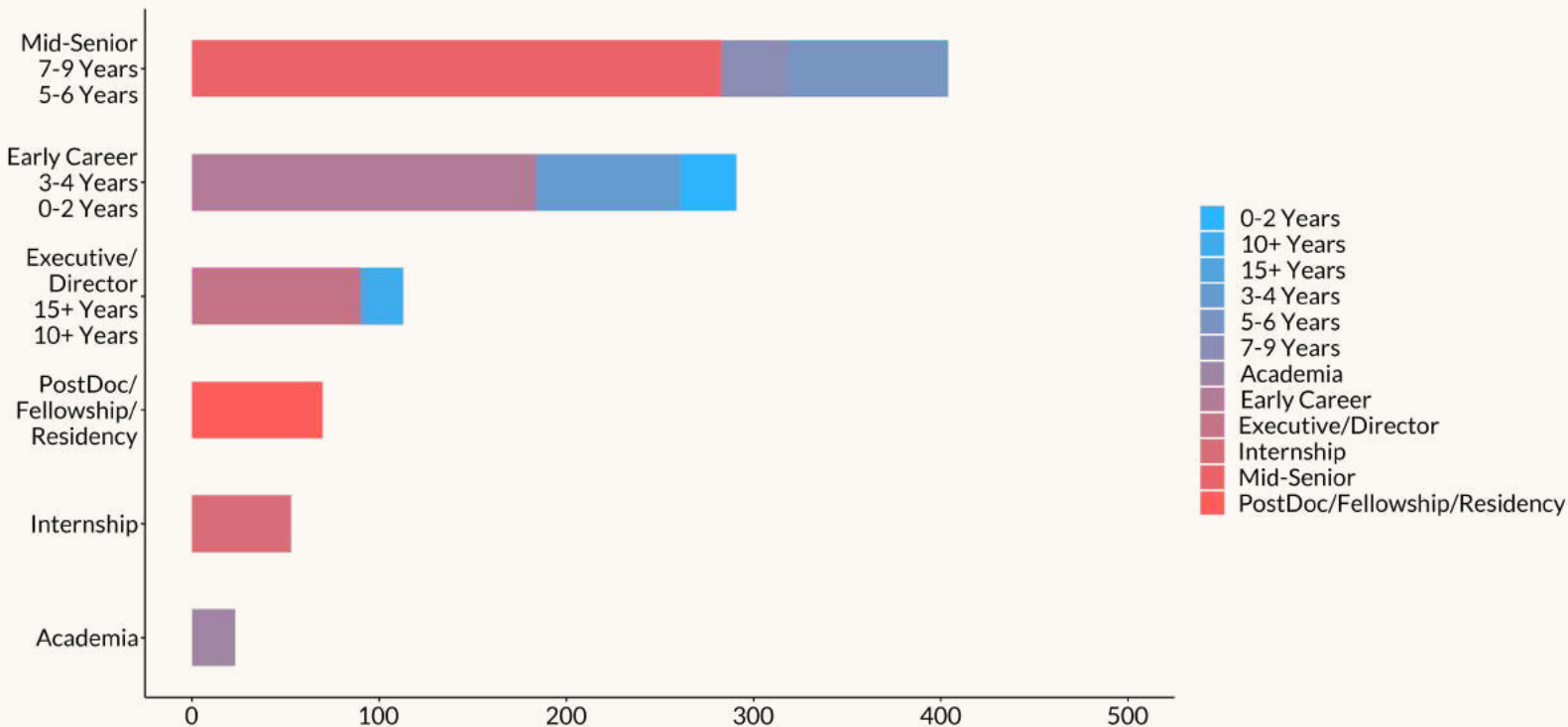
We discovered that Research, Tech Policy/Law, Responsible AI, Trust & Safety, and Program/Project Management round out our Top 5.

Our data shows that mid-level roles continue to be the most plentiful.

While early career roles are the second most abundant, the category is heavily skewed toward 3-4 years of experience rather than 0-2 years. Fellowships and internships are also lagging behind for candidates that seek out those crucial initial experiences in the field. (Of note, there are more fellowships and internships than entry level roles for those with only 0-2 years of experience).



all tech is human



Note: Some of the roles fit into multiple categories.

LEARNINGS FROM OUR RESPONSIBLE TECH JOB BOARD

Despite the recent announcement that Meta is disbanded its Responsible Innovation team, we expect to see early career opportunities grow as Responsible Tech departments within industry continue to mature and expand beyond early hires, which tend to focus on senior-level roles.

Our conversations with hiring managers provide insights into the skills, experiences, and educational backgrounds that are most highly sought after, and we incorporate these learnings into the advice we give to job seekers for how to best prepare themselves to become great candidates, secure these roles, and contribute to the field of Responsible Tech.

One of the trends we have noticed is the emergence of these Responsible AI or Digital Ethics teams in industries far beyond the commonly understood “Big Tech” companies. We have been seeing this for a couple of years, but this trend is accelerating. **As companies in every industry increasingly utilize machine learning and amass large amounts of user data, there is a growing need to develop Responsible Tech teams, and we are seeing an influx of new hires across companies and industries.**

Responsible AI and Digital Ethics teams have been forming and growing at companies like:

- Grammarly
- Indeed
- JP Morgan Chase
- Lego
- Mastercard
- Pfizer
- Stripe
- Takeda Pharmaceuticals
- Thomson Reuters
- UnitedHealth Group
- Workday

The total number of available roles is on the rise across Responsible AI as well as Trust and Safety as the impacts of online spaces and the stakes involved in online safety are more fully understood.

It can be challenging to break into a new field, especially one this nascent, lacking well-defined academic pathways, within a fast-moving industry like Tech, in the midst of evolving regulatory environments across the globe.

In the coming year, we are prioritizing the following growth areas for the job board:

- Increasing the number of international offerings outside the U.S.
- Incorporating more government tech roles at the local level in key cities across the globe
- Including a more comprehensive variety of roles in academia

RESPONSIBLE TECH TALENT POOL & MATCHMAKING SERVICE

All Tech Is Human recently launched our personalized Talent Matchmaking Service to connect hiring managers and recruiters with Responsible Tech talent within the All Tech Is Human community and our extensive network of talented individuals who are ideal for these hard-to-place roles, and we have just opened up our Responsible Tech Talent Pool for job seekers who are interested in connecting with these employers!

This private platform is open to those currently looking for a role as well as those already in a role but interested in being notified about additional opportunities in Responsible Tech:

- Responsible AI
- Online Trust & Safety and Integrity work
- Public Interest Technology
- Tech Policy
- Digital Governance
- Data Privacy
- Accessible & Human-centered Design
- Tech & Wellbeing
- Tech & Democracy
- & more!

We have built up extensive relationships with hiring managers, amassing invaluable insights into emerging careers, desired skill sets, and an understanding of how we can better align individual career paths, employer needs and job descriptions, and new university programs being launched to educate the next generation.

With our Talent Matchmaking Service, our business model (to offset our reliance on foundations as a small non-profit) is to charge the employers a 10% finder's fee for successful matches which allows us to assist thousands of individuals freely through our job board, mentorship program, office hours, mixers, and more. Cost should never be a barrier to bring in new voices!

RESPONSIBLE TECH MENTORSHIP PROGRAM

All Tech Is Human works to create equitable career development opportunities for our community by providing an open and welcoming space for building a strong network. Part of these efforts include organizing a free six-month Mentorship Program that partners incredible responsible tech leaders with practitioners and aspiring professionals.

Our recent 2022 Spring cohort connected 180 individuals from 27 countries across the globe, gathered into pods of four (one mentor to three mentees) to deepen peer relationships and to build mentor/mentee connections for a virtual mentorship program with six monthly sessions each focused on a different topic, plus access to private Slack channels for each pod as well as a private mentor channel and private mentee channel.

For the next cohort, we plan to provide additional networking opportunities for all participants, private mentor networking sessions for deepening connections among senior talent, and cross-collaboration between pods.

Feedback from our most recent mentorship cohort revealed that participants valued the opportunity to meet like minded people at different stages of their Responsible Tech careers in a safe environment that was conducive to speaking candidly about work and career development.

Mentors appreciated the opportunity to influence the interests and ambitions of mentees, and to expand and clarify for mentees the wide array of potential pathways and career opportunities available.

Mentees gained confidence in their interests and developing areas of expertise, as well as new insights into potential career options. Mentees developed connections with peers holding similar interests and deepened their support networks as they work to achieve similar goals.

"The group of mentees were absolutely incredible. Diverse group of talented individuals who were extremely impressive and came into the mentorship with clear ideas of what they wanted from the program and All Tech Is Human overall...I also learned a ton from them - it was certainly a mutually beneficial relationship that was very rewarding." *Anonymous Mentor Feedback*

You can apply to join our next cohort! See our website to sign up on our ongoing [waitlist](#) interest form for the next cohort's mentors and mentees.

UNIVERSITY AMBASSADORS PROGRAM

All Tech Is Human's University Ambassadors Program attracts students across the globe who want to create Responsible Tech student clubs, organize and host Responsible Tech events, expand the Responsible Tech movement on their own campuses, and learn more about the field – to network, to find peers and mentors, to deepen their understanding of the space and to explore the varied professional and educational options, as well as to give back to the larger community.

Our University Ambassadors program, currently comprised of students from approximately 85 universities worldwide, provides an opportunity to connect with likeminded students across the globe who are often navigating without a clear sense of common degree programs that lead directly to jobs in the field of Responsible Tech.

This lack of clearly defined academic pathways is why we have undertaken a **Responsible Tech University Ecosystem Mapping Initiative** to examine the many emerging degree programs at the intersection of tech and society, as well as the faculty who are researching these issues and teaching these courses, and the student clubs addressing topics in Responsible Tech.

This resource will be released later in the fall and will serve as a helpful guide for students looking into academic programs for their undergraduate majors or trying to navigate where to head for grad school to pursue masters and doctoral degrees and graduate certificates. As part of this initiative, we're also tracking professional certifications, which is an increasingly important component of the ecosystem as career changers look for upskilling opportunities.

We find Responsible Tech degree programs offered within colleges and schools focused on a variety of disciplines, including: Philosophy, Public Policy, Law, Engineering, Computer Science, Data Science, Information, Design, Sociology, Anthropology, Social Work, Education, Communication, Business, Arts & Sciences.

Many students were first introduced to the Responsible Tech movement through a single, typically undergraduate, course. Another crucial impetus for sparking interest in the field has been the influence of documentaries like *Coded Bias* and *The Social Dilemma*.

The University Ambassadors program also provides an opportunity for interested students to join our group peer review initiative – we've partnered with *Springer AI and Ethics Journal* for students to gain experience of the anonymous peer review process.

Reach out to Rebekah Tweed at rebekah@alltechishuman.org

NEED DIRECT GUIDANCE? SCHEDULE OFFICE HOURS

As part of our goal to help make the Responsible Tech field more welcoming and inclusive, All Tech Is Human began to offer Office Hours in February 2022. Over the course of eight months, 65+ office hour appointments have been scheduled by people from a diverse range of backgrounds and experiences.

Office hours are a free resource we provide to engage and connect with our community in the Responsible Tech Movement.

The three main types of office hours people can schedule are:

- 1) general office hours
- 2) volunteer program
- 3) university ambassadors

General office hours are spent discussing a range of topics from ‘what All Tech Is Human does’ to field and job insights. Volunteer program focuses on how people can get involved in the All Tech Is Human's many projects, reports, and gatherings.

Who's coming to office hours?

- Students ranging from undergraduates to PhD candidates
- Recent graduates
- Early career professionals
- Mid-career professionals
- Non-technical backgrounds pivoting into Responsible Tech
- Technical backgrounds pivoting into Responsible Tech

The typical reasons for interest include a general curiosity about the Responsible Tech field, tech policy, Trust & Safety, AI ethics, and research opportunities.

Want to connect and chat about how you can leverage All Tech Is Human's free resources and activities? Looking to get more involved in the Responsible Tech ecosystem? Schedule some time to talk through my Calendly link [here!](#)



CATE GWIN
PROGRAM ASSOCIATE, ALL TECH IS HUMAN

Careers in Responsible Tech

Hear from the individuals leading major companies and organizations in the Responsible Tech field.

Check out the latest careers in Responsible Tech on our Responsible Tech Job Board at AllTechIsHuman.org, join our mentorship program, and take part in our new Responsible Tech Talent Pool.

Alexis Wichowski

Deputy Chief Technology Officer, Innovation at Office of Technology & Innovation, City of New York



Tell us about your role:

I have three roles, which is how I've made my career in Responsible Tech: government, teaching, and writing. Despite their differences, my "why" is the same: to make sense of technology's colossal changes to our world.

Government's my day job: I test new ways for agencies to make use of tech tools and digital-era ways of working so we can better serve our fellow citizens. Teaching's my night job: I work to help the next generation of Responsible Tech professionals on how to get things

done and create habits for big picture thinking in ways day jobs don't always permit. Writing's my 4am job: it's how I piece together what I'm learning into a coherent whole, in ways I hope are both not boring and hopefully help others learn as well.

What skills have you found most valuable in your current role?

Omnivorous learning. Already know something? Learn how to do it better or what's new about it. Don't know something yet? Find who does. Watch and observe from a

distance, or ask directly. Learn for a clear purpose – to complete that certification or graduate with this degree. But also, learn just because – for no reason. Whenever some part of your brain seems to wonder about something, trust it, skim, read, and browse about it. Keep track of these "no-reason learnings" because patterns tend to emerge in time. Find how they fit your existing skills kit or perhaps add new ones to it. Learn for all reasons – for obvious ones, and the weird ones, without judging your "why." It's not always easy but it's a sure-fire way to keep growing.

What advice would you give to others looking to build a similar career?

Create structures that lock you into learning. For me, it's been teaching. Preparing to teach 30 graduate students about tech and government isn't like prepping a class about ancient civilizations. It's a subject that changes in real-time. By committing to teaching, I am committing to keeping current on what's happening in the Responsible Tech landscape, which requires that I keep learning. It doesn't matter if I'm feeling tired or lazy or cranky, I created a situation that locks me into learning, figuring out what's most important, and how to share this with my students once a week every year (and usually then writing an article about it). It doesn't have to be teaching a class or publishing, of course – create whatever structure best fits your life – then lock it in.

What individuals, organizations, or resources have been instrumental in advancing your career?

This may sound absurdly simple, but it's true, intentional acts of kindness. Here's why; work can be stressful; especially, as one moves into higher positions of authority. When everyone's exhausted and stressed out, and kind of miserable, intentionally creating moments that remind us that we're all human – and just

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being humane with one another – not only makes the moment easier for everyone, it generates goodwill. And over time, this goodwill has led to good things, from being suggested for jobs I hadn't even known existed (and was then recruited for) to being given key information at just the right moment to avoid some hidden pitfall. Intentional kindness (when it's sincere – people can smell fake kindness a mile away!) not only makes tough work moments just a bit easier, it's played a significant role in so many opportunities that I've been given.

In your opinion, what are the most important issues in Responsible Tech today?

Compassion. We have so much tech already designed to make us more efficient and more productive. What we need now is tech designed to make us more compassionate with one another.

Connect with Alexis Wichowski @awichowski

By committing to teaching, I am committing to keeping current on what's happening in the Responsible Tech landscape, which requires that I keep learning.

-Alexis Wichowski, Deputy Chief Technology Officer, Innovation at Office of Technology & Innovation, City of New York

Amira Dhalla

Director, Impact Partnerships and Program (Privacy and Security) at Consumer Reports



Tell us about your role:

Consumer Reports is an independent, non-profit that speaks directly to, and for, consumers across the nation, while standing up for the issues they care about. In my role, I work closely with organizations helping to advance similar missions to develop impactful and collaborative projects. These projects focus on how we have to improve the cybersecurity and privacy of products and tools in the marketplace, while also tackling topics like discriminatory

technologies and the impacts algorithmic biases have in the systems that surround us.

How did you pave your career in the Responsibility Tech field?

As someone who's always been excited about the future of technology, I started my career early working at start-ups, where I got first-hand experience of what it was like to build, launch, and develop emerging tech. As I continued a career in technology, going beyond start-ups, I found myself chasing projects and roles

that were guided by the issues faced by communities I cared about. Working with communities around the world, I was able to thread similarities in their concerns with the technology they use and how it impacts them on different levels. I realized the various threats emerging technology poses to historically oppressed people and have spent many days since then advocating for a more inclusive and safe digital world.

Where do you see the future of Responsible Tech headed?

In a recent Consumer Reports survey, we asked individuals who were responsible for protecting the privacy and security of individuals – not surprisingly, most selected the federal government (33%) which was followed closely by companies (32%) and individuals (25%). The future of Responsible Tech includes a framework for how we understand and practice accountability among those respective stakeholders. All of us have to be more accountable to how technology impacts the most vulnerable people using it and our respective role. In doing so, we will see more roles evolve that involve ethical decision-making that is directed towards companies or trust and safety teams that protect individuals. We will also see more resources and information that shows how our digital systems impact people without them even realizing it.

What does a better tech future look like to you?

One thing I'm looking forward to seeing in the future is how the term "Responsible Technology" is integrated in academic institutions. Schools are vital to the development of technology skills, but we're starting to see more conversations on how Responsible Tech becomes a core part of curriculum. Instead of just learning how to become a software engineer or a designer, a school

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can also have mandatory curriculum on how to reduce biases in code or prevent deceptive design patterns. In turn, we'll see a field that is filled with people who are creating audience-facing technology in a more responsible way.

In your opinion, what are the most important issues in Responsible Tech today?

AI is growing at an unprecedented rate and companies are rapidly adopting AI solutions to improve their products while individuals are increasingly bringing AI products in their lives and homes. It's clear AI will impact almost every industry in the future and our personal experiences navigating physical and digital spaces. If we don't figure out how to create and govern AI in a way that is centered on human rights, we run the risk of letting these systems further alienate and harm individuals. Currently, systems built on AI are determining our access to health care, financial services, housing, and many other parts of our livelihood. It is resulting in unfair practices towards people – often without them knowing it. To solve this we need to increase public awareness, hold companies accountable for the discrimination codified by their products, and create better policies that create more fair, just, and equal AI practices.

Looking ahead, what makes you optimistic that we can build a better tech future?

A better tech future depends on the people. Whether it is people combining power to create movements that improve technology for everyone, or it is individuals who are developing new technology to address the harms others have felt. I'm optimistic in people's abilities to hold each other and the systems accountable.

Connect with Amira Dhalla @amirad

A better tech future depends on the people. Whether it is people combining power to create movements that improve technology for everyone, or it is individuals who are developing new technology to address the harms others have felt. I'm optimistic in people's abilities to hold each other and the systems accountable.

**-Amira Dhalla, Director, Impact Partnerships and Program (Privacy and Security)
at Consumer Reports**

Andrea Owe

Research Associate at The Global Catastrophic Risk Institute



Tell us about your role:

I am an environmental moral philosopher working as a researcher in the field of existential and global catastrophic risks. These are risks that threaten the world and human civilization in some major sense, such as nuclear war, asteroid impacts, climate change, and ecosystem collapse. Artificial intelligence is also considered such a risk by many, while many again believe that AI can be greatly beneficial to society if developed and applied wisely.

Over the past couple of years, I have researched the intersection of AI and environmental issues in the context of catastrophic risk. If AI is to truly be beneficial for the world, for all humans, and for all life on this planet, and if AI is to help mitigate the environmental crisis rather than exacerbating it, then AI needs to be designed, used, and governed by nature-centered values. The current AI discourse is not on such a trajectory, so I'm working to push it onto the right track through research, policy impact, community building, and outreach.

What advice would you give to college & grad students looking to be involved in the Responsible Tech ecosystem?

Don't assume technology is good in itself: it's only good if it advances good things, which should include counteracting major global issues like climate change, ecological destruction, biodiversity loss, increased inequalities, power centralization, and loss of democracy. These are extremely complex. Seek knowledge broadly to understand technology's role within this landscape, where technology can help, and where it does not.

You don't need a STEM degree. You might better contribute to Responsible Tech through, e.g., law, psychology, economics, policy, or political or environmental science. Find the sweet spot at the intersection of what you're good at, what cause is closest to your heart, what the world needs the most, what not enough people are working on, and where you think you can have the greatest impact. Do that.

Apply a holistic, systemic perspective. The collective human agency impact sphere now stretches planetary-wide and far into the future. Technology increasingly infiltrates this agency. Identify costs and benefits to humans, other Earth-life, and ecosystems across space and time.

Within your area of practice, who still needs to be included in your field?

Within AI R&D, there's poor diversity in terms of demographics, disciplinary backgrounds, and philosophical views. This means little diversity in views about what is good and important, how to solve problems, and defining human wellbeing and societal progress. Currently, the demographic leading AI development largely represents the demographic whose views have and do fuel the socio-

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environmental crisis, through systems of human, nonhuman, and environmental exploitation, and which have been the elite benefiting from these systems. As AI becomes increasingly capable, this isn't only an issue of justice but also of risk. Poor diversity of insights could lead to important oversights and thus failure to mitigate major threats, and to AI being only narrowly beneficial.

Within AI ethics, there is greater demographic diversity but still a major lack of representations of ethics of non-western, Indigenous, marginalized, and future populations, and virtually no considerations for the rest of Earth-life and the planet's health. I very much want environmental researchers, lawyers, and policymakers to get involved with AI.

What does a better tech future look like to you?

If technology is to be a net positive for the world, it needs to serve the interests of society as a whole, its different human populations and communities in a just way, and the interests of the planetary ecosystem on which society, all life, and everything we may care about depend. A good tech future is a future in which technology is not a tool to further the domination, subjugation, and exploitation of humans, non-humans, and nature, but as a public means to advance fundamental values such as equity, justice, peace, democracy, global cooperation, and human, nonhuman, and planetary wellbeing. If technology can help human society become less anthropocentric and help humans become better humans, then the socio-technological sphere can be meaningfully reconciled with the socio-environmental one.

In your opinion, what are the most important issues in Responsible Tech today?

1. Ensuring that technologies help mitigate the climate-environmental crisis rather than exacerbate it.
2. Ensuring that technologies help mitigate social harms and injustices rather than exacerbate them.
3. Regulating the development of AGI.

What is one major change that you would like to see in the next few years?

I want to see technology democratized. Unfortunately, the tech industry is currently deeply integrated with social, political, and economic systems that are inherently unjust and largely harmful. I don't believe these systems can create a sustainable, safe, and flourishing world for humans and nonhumans alike. For example, current AI systems require massive amounts of energy and natural resources. Many of these systems are not used to advance public goods, but to exercise social control and manipulation, and to generate profits for the already wealthy. The lack of democratic processes for AI development and use enables the justification that environmental (and social) resources are prioritized to such ends over others.

Due to this entanglement, advances in technology are largely hindered from being a public and planetary good. A democratization of technology could improve safety regulations, ethical assessments, and distribution of benefits.

I also want to see a binding global treaty in response to safety concerns from advanced AI.

Connect with Andrea Owe @OweAndrea

Antonina Vykhrest

Harassment and Bullying, Global Program Manager at TikTok



Tell us about your role:

As Global Program Manager for Harassment and Bullying, my role is to design and implement a roadmap for reducing and mitigating harm on the platform as it relates to harassment and bullying. I do so by working closely with our Product, Ops, Policy and Data Science teams, among others. It's a role that requires extensive cross-functional management and alignment, as well as strategic design and execution. My North Star is fundamentally to protect our users from different forms of harm and to cultivate a

positive set of norms.

What advice would you give to college & grad students looking to be involved in the Responsible Tech ecosystem?

I would strongly encourage students to explore careers in Trust and Safety. It's a relatively recent field that has been rapidly growing especially in the past 10 years. It is focused on making products, platforms and our digital communities safer, and I believe a critical part of it is thinking through innovative ways of designing our

systems to incorporate social and legal protections into the tech of tomorrow. This requires very close collaboration between industry, government, academia and social movements, to make sure we are paving the path for creating vibrant communities online and working together to tackle bad actors. There are therefore many ways to contribute and different pathways to explore including product, policy, data science and engineering, among others.

What are the misconceptions about your role?

Some of the more basic misconceptions center on not understanding how complicated it can be to prevent and reduce harmful behavior and activity online. There is nothing easy or simple about preventing violent extremism or human trafficking in the real world. Similarly, it is not more straightforward in the digital world. While the tech industry should absolutely be kept accountable and we should always be striving to do better, there are misconceptions at times about the trade-offs that someone working in Trust and Safety is making. For example, one of the most critical trade-offs for social media platforms is the one between freedom of expression and freedom from harm (psychological, emotional or even physical), two fundamental human rights. Given the many regional, socio-political and legal nuances involved, our teams work to try to incorporate many of these basic protections in the ways in which we design and operate our platforms. We have many very committed and talented individuals in Trust & Safety with diverse backgrounds in tech, government, social justice and academia, working to address these fundamentally difficult questions and we need to continue building out the Responsible Tech pipeline to include many more young and driven individuals in these efforts!

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In your opinion, what are the most important issues in Responsible Tech today?

Some of the greatest risks and challenges for the Responsible Tech industry are to constantly adapt to address new manifestations of harm and to tackle the fundamental challenges to human rights. This ranges from preventing cybercrime such as the spread of child sexual abuse material, to protecting historically discriminated groups from disparate impact and discrimination via tech, to fighting misinformation and threats to the integrity of electoral processes.

Connect with Antonina Vykhrest @a_vikhrest

“Some of the greatest risks and challenges for the Responsible Tech industry are to constantly adapt to address new manifestations of harm and to tackle the fundamental challenges to human rights.

-Antonina Vykhrest, Harassment and Bullying, Global Program Manager at TikTok”

Dan Taber

Head of Data Science, Trust & Safety, Spotify



What skills have you found most valuable in your current role?

Two things stand out: cross-functional communication and being comfortable with ambiguity. At work, I'm as likely to collaborate with a lawyer or policy director as a product manager or staff engineer. You need to recognize how different people approach their work, what skills everyone brings, and where values may differ. And we're often tackling complex social issues that raise a lot of nebulous challenges. We work in a field with little precedent, so there's no

playbook to follow - often we're creating the playbook - and you need to be ok with that ambiguity. I've seen talented, experienced professionals struggle working on Responsible Tech because they were accustomed to projects that were easier to define and had more established ways of working.

What advice would you give to others looking to build a similar career?

Be prepared to blaze your own path. There's a good chance your ideal role doesn't exist now. Or, if it

does, it'll look vastly different in 3 years. Responsible tech is still at a nascent stage where jobs aren't always clearly defined and organizations are figuring out what they do. Roles, organizations, and industries will likely evolve as technology and regulations change, and people working in Responsible Tech will need to change with them. My journey started as a 3-month experiment that basically kept getting extended, quarter by quarter; change was constant throughout. Then I looked up and 4 years had passed. It's not like I had a 4-year plan from the beginning - I simply had to figure it out as I went.

Within your area of practice, who still needs to be included in your field?

Communities most impacted by technology need to be more directly involved in changes that are happening. Too much Responsible Tech work happens in silos that don't connect with actual people who are affected. Of all the projects I've been involved in, my favorite was the one where I simply sat and listened to people whose future was influenced by the technology I worked on. Hearing their perspectives was a reality check for me. I don't do that nearly enough and I don't think most organizations do.

Looking ahead, what makes you optimistic that we can build a better tech future?

I've been fortunate to work at 2 companies with great cultures where people genuinely cared about Responsible Tech. I'm constantly amazed how many people volunteer to help me on projects I do. The same goes for non-profits I've collaborated with outside of work. Everybody is busy, few people are paid to do Responsible Tech, yet people offer their time and skills once they hear what I'm working on. This doesn't magically wash away all the structural barriers that make change difficult. But it

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gives you a lot more faith that change can happen. I've seen institutional changes that people said were impossible, and the change wouldn't have happened without A LOT of support from people who simply wanted to help.

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-Dan Taber, Head of Data Science, Trust & Safety, Spotify

David Sullivan

Executive Director at Digital Trust & Safety Partnership



Tell us about your role:

I'm the founding executive director at the Digital Trust & Safety Partnership, a first-of-its-kind initiative, committed to developing industry best practices (reviewed through internal and independent third-party assessments) to ensure digital services are used in a safe and trustworthy manner. In 2022, we published an inaugural report evaluating the trust and safety practices of 10 leading tech companies. Before joining the Partnership, I spent a decade growing the Global Network

Initiative, a multi-stakeholder coalition of technology companies and human rights groups working together on freedom of expression and privacy rights. And I came into the Responsible Tech space from a career in humanitarian response and human rights advocacy.

How has the field evolved and improved?

Responsible Tech is a powerful umbrella term that brings together fields that until recently did not really speak to each other. For

example, development organizations deploying tech for good had relatively little interaction with human rights advocates working to prevent tech from causing harm. And individuals working inside tech companies on trust and safety had relatively little contact with advocates and academics outside the industry. Fortunately, this is changing for the better, as individuals move to roles in different types of organizations, and as the community takes a holistic approach to ensuring that the benefits of digital technologies do not come at the cost of the safety and rights of others. You can see the concrete ways that companies are dedicated to improving their practices through our partnership, such as by formalizing the relationship between trust and safety and product teams to better integrate these perspectives into product development.

Within your area of practice, who still needs to be included in your field?

We still have a lot more work to do to ensure that the practitioners working on Trust & Safety inside and in partnership with tech companies reflect the global diversity of the users of digital products and services.

What are the misconceptions about your role?

A lot of people are understandably focused on what types of content companies should be concerned with, from hate speech and terrorist content to mis- and disinformation. The Digital Trust & Safety Partnership is not telling companies how to define these terms or what content to allow on their products and services. There is no one-size-fits-all approach to trust and safety. What companies can do together is jointly commit to our framework of commitments and practices, which will help them manage their unique content risks, whatever they may be.

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In your opinion, what are the most important issues in Responsible Tech today?

Just about any issue, from democracy to sustainability to healthcare, now has a tech angle. My view is that we must focus on building robust systems and practices, especially for trust and safety, that companies and organizations can use to address the risks we cannot foresee that are coming over the horizon.

Looking ahead, what makes you optimistic that we can build a better tech future?

A revolution in tech responsibility is underway. From the advent of new organizations working at the forefront of these issues, to the evolution of the teams within large tech companies, to the growing importance of building expertise within institutions of government, academia, and civil society, there are more people with more knowledge dedicated to the responsible development of the technology field than ever before. It's entirely understandable that not everyone will agree about what is to be done, but when we do find areas of common ground, I believe that will lead to the kind of problem solving that begets real innovation.

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-David Sullivan, Executive Director at Digital Trust & Safety Partnership

Deb Donig

Professor, Cal Poly SLO & Co-founder of the Cal Poly Ethical Technology Initiative



Tell us about your role:

I'm an Assistant Professor of English Literature at Cal Poly, and the co-founder of the Cal Poly Ethical Technology Initiative. I am also the host of "Technically Human," a podcast where I talk with major thinkers, writers, and industry leading technologists about the relationship between humans and the technologies that we create, which is ranked as one of the top 15 ethics and technology podcasts on the web. I created and I teach the university's "Technically Human" course on ethics and

technology. I also teach and publish in a wide variety of areas, including human rights, science fiction, ethical technology, African and Caribbean literatures, and The New Yorker. In 2020, I also worked to connect the issues of my research with policy—I served as a policy expert on the Biden/Harris Policy Strategy Team in Higher Education.

How did you pave your career in the Responsibility Tech field?

I come to the Responsible Tech field with a background in human rights, which led me to write my PhD

dissertation on the evolution of human rights over the 20th century. Realizing that I really couldn't talk about human rights in the 21st century without talking about technological innovation (democracy overrun by "algocracy"—rule by algorithm; free speech; democratic revolutions in Africa; or Facebook's role in engineering a genocide in Myanmar), I started thinking about how technological products and practices were shaping the terrain of human rights in our current moment. On another level, I'm a literary scholar by training.

To that end, I fundamentally believe in the feedback loops that take place between the realm of the imaginary—science fiction, futurisms, mythologies, utopias—and technological production. Before we can create technologies, we first must imagine them; what we build, and how we encode values into what we build, depends on the stories we know and the stories we tell. To that end, I think that we should really scrutinize, interrogate, and understand the stories we tell about our tech, our values, and our vision for ourselves—and we should probably take some time to understand how those visions can, and often do—as in the case with dystopian science fiction—go terribly, horribly, wrong. We'd probably learn a lot if we did.

Where do you see the future of Responsible Tech headed?

I spent the 2021-2022 year trying to understand the emergence of a new workforce at the intersection of ethics and technology, documenting and assessing the rise of public interest and Responsible Tech jobs, in a project grant awarded to me by the National Science Foundation. The data is clear: there is more than a growth of jobs in the responsible/ethical tech intersection, but rather an entirely new profession. The challenge lies in the fact that we have very little data, so far, about the skills and background hiring managers are looking

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for—or how effective these workers actually are in the roles that they have been hired for, in terms of actively changing outcomes of tech processes and products. We need to know this, though, not only to be effective in transforming the landscape of the tech industry, but also because the next generation of tech workers will need to be able to be proficient in the Responsible Tech practices. That's why I see the future of Responsible Tech as both a new and emerging profession, and also a new field of inquiry, research, and teaching—one that, I think, can revolutionize education as the demand for technologists who can think in terms of humanistic values, and the demand for humanities thinkers who can think in technological ways, grows expansively.

What does a better tech future look like to you?

One of the problems with the ethical/Responsible Tech movement is that it optimistically seeks to change how workers think about the work they're doing, and how the products turn out, but it doesn't grapple with the undergirding structures around tech production that end up becoming root causes of the unethical tech practices and products that emerge. That's why, even as someone working at, and advocating for, ethical and Responsible Technology as an area of industry and organizational development, as a field of study, and professional sector, I sometimes wonder about both the efficacy of and the industry logic behind these jobs. They're great PR for companies, and if the industry can get out ahead of the critical discourse by responding with 'ethical' workers, then they can create the structures for regulation on their own terms rather than having potentially unfavorable commitments to a certain standard of conduct not on their own terms, or, we might call them, laws and regulations.

By hiring “responsible” workers or instituting responsible practices (often announced very loudly), they gain social capital for doing so. They also create an “opt in” structure where they get to decide whether or not to follow ethical recommendations, rather than being bound by laws, which might move much more swiftly without an internal regulatory gesture. And as long as the incentive structures don't change, then you can hire as many “ethical” or “responsible” workers as you want. But if the incentive structure is unconscionably hasty growth, maximized for profit and the creation of value for shareholders, and if your CEO is either bound to, or driven by that incentive structure to maximize profit, and then your ethics team makes a recommendation that might compromise that profit, and your CEO needs to maximize for profit, then it doesn't matter how many ethical workers you have or how equipped they are to make ethical recommendations or interventions.

So, to my mind, if we want a truly better tech future, we need to think about the structures both within AND beyond tech that direct the outcomes technological processes and products, namely changing regulations around tech practices, and changing the financial structures--venture capital, stockholder value as a primary corporate obligation, corporate greed--that govern tech production as they do.

In your opinion, what are the most important issues in Responsible Tech today?

Much of the “techlash” discourse and the study of the negative consequences of technology, to which the Responsible Tech movement responds, has focused on the products themselves, a study that seeks to investigate, explain, and articulate the damage done by tech products already created and in distribution. This is necessary, but not sufficient. While retrospective understandings provide formative lessons and underpinning explanations necessary for reassessing and reconstructing products and processes for future technological innovation, culture, and governing legislation, it is necessarily reactive, for obvious reasons. But we are very limited in what we can do if our critique and interventions are largely reactive—we need to become proactive in thinking about where technological production should or could be, if it were to be truly responsible.

Our movement, I think, already understands the relationship between technological innovation, ideation, and production as tethered to the structure and composition of the workforce. As I always propose, before any tech product can be created, it must first be imagined. It makes sense, then, to focus not on the products but on the people creating those products. Those involved in the imagination process—from inception, to design, to concepts of user interaction, to strategies of distribution—are determinative. Proactive approaches that seek to change the structure of the culture and the products that emerge from it must, then, necessarily be approached as a workforce problem; companies that understand this will enlist workforce development and planning as crucial to strategic assessments of outcomes in any long-term future planning of the company. So, to my mind, we need to focus on cultivating the workforce, not just on critiquing the work.

Diana Spehar

Data Ethics Lead at Sky Group



Tell us about your role:

I work as Data Ethics Lead for Sky Group, helping teams at Sky to use the data at their disposal in an ethical manner, which includes adherence to ethical data behaviors. I'm actively involved in shaping the design of ethical tools, standards and policies as well as bringing the conversation about data ethics and responsibility to the fore across the business. My role entails driving teamwork and partnership to embed ethics into business frameworks. I feel privileged to serve as Co-Chair of

the Digital Ethics Network, an employee-led body on a mission to bring ethical thinking and design to the use of data and technology at Sky.

How did you pave your career in the Responsibility Tech field?

My background combines IT strategy consulting, tech advocacy and policy, and tech innovation. I regularly draw on my experience in mobile for development (also known as ICT4D/tech for good) and deep tech innovation. Previously, I worked with mobile operators to

reduce the gender gap in mobile internet in low- and middle-income countries. We leveraged the available data from the telecom companies to inform our strategies and to enable social impact. The telecoms industry has an enormous potential to enable socioeconomic benefits using the power of data, if used responsibly. Working with different players within the sector has allowed me to identify common challenges and to test out various 'tech for good' initiatives, be it designing acceleration programs or advocacy strategies. A baseline knowledge of sectoral trends can also go a long way; it has made me more confident in working with entrepreneurs and supporting them on their business development journey, a task that I found equal parts exhilarating and daunting.

What advice would you give to college & grad students looking to be involved in the Responsible Tech ecosystem?

I would advise the graduates to follow their curiosity. Whenever I have found myself at a career crossroads, it has served me in good stead to revisit the interests I had cultivated during my formal education. There is no shortage of multidisciplinary problems in the tech sector, and I believe intellectual curiosity is an important driver of career satisfaction.

Equally, acquiring a subject matter expertise in one of the more traditional areas, such as law, policy, data architecture, and more, may pay dividends over the long run. Roles such as mine did not exist five years ago. As the field evolves, I see more demand for transferable skills from the traditional sectors. Finally, it is never too early to start identifying your values and to think about the role work plays in enabling your desired lifestyle. An interdisciplinary field like ours will have to make space for different career paths and lifestyles, and I believe that can only be a good thing.

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In your opinion, what are the most important issues in Responsible Tech today?

Just about any issue, from democracy to sustainability to healthcare, now has a tech angle. My view is that we must focus on building robust systems and practices, especially for trust and safety, that companies and organizations can use to address the risks we cannot foresee that are coming over the horizon.

Looking ahead, what makes you optimistic that we can build a better tech future?

A revolution in tech responsibility is underway. From the advent of new organizations working at the forefront of these issues, to the evolution of the teams within large tech companies, to the growing importance of building expertise within institutions of government, academia, and civil society, there are more people with more knowledge dedicated to the responsible development of the technology field than ever before. It's entirely understandable that not everyone will agree about what is to be done, but when we do find areas of common ground, I believe that will lead to the kind of problem solving that begets real innovation.

What is one major change that you would like to see in the next few years?

From my experience, the UK's tech sector lacks a commonly accepted definition of terms such as data ethics, AI ethics, and digital ethics. Unsurprisingly, there is no standard template for operationalizing data ethics in practice, which leads to various interpretations. On the other hand, an increasing number of multinational companies are wising up to the customers' demand for more transparency into the way their data is being used. For individuals, this is a relatable concept, as we think about personal data sharing and our own usage of various apps and services. Studies show us that societal leadership is now perceived as the core function of business and an increasing number of brands are turning data ethics into a competitive advantage. However, we are yet to see a rise in viable and transparent business models that put data ethics at the center of the customer journey. We need to see more examples of ethical data maturity practices, and ethical product and design initiatives.

Connect with Diana Spehar @diana_spehar

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-Diana Spehar, Data Ethics Lead at Sky Group

Elizabeth Milovidov

Digital Child Safety, Senior Manager at The LEGO Group



Tell us about your role:

I work so that children can navigate their online worlds enjoying opportunities with minimized risks and so that parents can have peace of mind knowing that their children are online responsibly. I do that in two ways: at the LEGO Group, as Digital Child Safety lead, I work to ensure that children's rights are respected, that their best interests are upheld, and that children engage in meaningful, fun, and creative digital experiences and engagements on our LEGO platforms. Our Digital Child Safety

team falls under the Responsible Child Engagement department and we are active across the LEGO Group, the LEGO Foundation and other stakeholders to spread the word about child online protection. As founder of Digitem.org, (formerly Digital Parenting Coach.com), my organization provides free resources and advice to parents and families looking for ideas on how to connect with their children in the digital world, how to have conversations with their children about tricky subjects, and how to allow their children to become resilient online.

How did you pave your career in the Responsibility Tech field?

In 2005, I wrote my PhD dissertation on the online commodification of children in intercountry adoptions, and I was absolutely captivated by the intersection of law and technology on children's rights and best interests (or lack thereof). After that, I tried to absorb as much as I could regarding Children's Rights and Technology. I took note of the major players in the area and I attended conferences and seminars to learn from thought leaders in the field. Once I noticed that parents were a missing stakeholder in so many discussions, I created my own consulting practice, to represent the voices of parents (and by extension, their children) in this exciting new digital age. Even today, I think that the best way that I can truly represent digital families is by staying up-to-date on the latest trends, challenges, laws, and innovative solutions.

What advice would you give to college & grad students looking to be involved in the Responsible Tech ecosystem?

Follow your passion. Follow the things that set you on fire in the morning and that you could easily spend days on end researching, daydreaming about, or chatting with others. Even if you started out in one area, you can always bring what you learned to the Responsible Tech ecosystem. For me, my path was never a simple straight line - I studied Economics at UCLA, then law and a Master's in political science at UC Davis. I practiced law as a litigator in San Francisco for a few years before moving to Paris, France. I worked in different jobs in industry, as a law professor, in non-profits all while getting my MBA and then PhD. The educational zig zags that I took, undoubtedly made my parents shake their heads - but every single degree, job, contact person, created the person that is writing this. Someone who is passionate about responsible

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technology for children, and who could talk about digital parenting and child online protection for days on end. (And yes I wake up in the morning on fire about digital child safety - every aspect).

What individuals, organizations, or resources have been instrumental in advancing your career?

It is not always about being in the right place at the right time, but about having the right people - who believe in you - that are in the right place at the right time. In my case, it was Janice Richardson (EUN/INSAFE network) who gave me my first job; Samantha Woolfe (INHOPE) who guided me; Susanna Greijer (child rights specialist) who shared her networks; Regina Jensdottir (CoE) who provided me with outstanding opportunities to share my vision; Philip Jaffé (UNCRC) who supported my dreams; John Carr (UKCISS) who let me shadow him; Sonia Livingstone (EUKidsOnline) who shared research; Stephen Balkam (FOSI), who consulted me; Carolyn Bunting (Internet Matters) who published my expertise; Alex Holmes (Diana Award) who shared his networks and expertise. Of course, the list is longer than this, but it should provide a glimpse into the driving forces of support behind what I do - with gratitude.

Within your area of practice, who still needs to be included in your field?

In my area of practice - digital parenting and Responsible Tech use for children - we need more insights, observations, research, and solutions from professionals dedicated to children and families. We need to know more about the impact of internet, technology, social media, online video games, connected toys, home assistants, and the like, with respect to child development, child psychology, child neuroscientists, pediatricians, speech therapists, chiropractors and any other fields that support how we raise children to thrive, to evolve, to become happy, healthy, and contributing members in their families, society and the world.

Which individuals or organizations do you believe are doing impactful work in building a better tech future?

Every parent or caregiver who raises a digital child is DOING IMPACTFUL work in building a better tech future. Every parent or caregiver who asks how they can support their child online will make an impact in their child's future. Every parent or caregiver who (in their own opinion), has had an epic fail in digital parenting is doing impactful work as they course-correct and find solutions that will help their children and families figure things out while becoming resilient. Every parent or caregiver who tries to play an online video game or make some content for a social media site or who co-watches a series or show streamed on TV is doing impactful work. The future is in the hands of the next generation and we parents and caregivers are only safeguarding it for them.

Connect with Elizabeth Milovidov @digiparentcoach

Follow the things that set you on fire in the morning and that you could easily spend days on end researching, daydreaming about, or chatting with others. Even if you started out in one area, you can always bring what you learned to the Responsible Tech ecosystem. For me, my path was never a simple straight line.

-Elizabeth Milovidov, Digital Child Safety, Senior Manager at The LEGO Group

Emma Leiken

Chief of Staff, Programs at Omidyar Network



What skills have you found most valuable in your current role?

It's a constant balance of depth vs breadth. Both are important. Functional skills like project management, writing, communications, grantmaking, stakeholder management are key – but subject-matter expertise proves valuable, too. For example, I care broadly about human rights in the context of technology. And I often draw on my background in international development, research, and South Asian studies. At the same time, I've found it

useful to cultivate interest and expertise a level down. For example, when it comes to the technology ecosystem broadly, my areas of focus have been focused on youth engagement, digital identity in South Asia, and trustworthy messaging. Having spike areas while still being able to see the big picture is important.

What does a better tech future look like to you?

On my team at ON where we focus on trustworthy messaging, we often talk about a vision of better

technology being rooted in both responsible design and governance. We need solutions at the product level (whether it's fact-checking, built-in friction, more accessible privacy features and terms of services) but we also need governance solutions – whether it's data retention policies or transparency and disclosure mandates for researchers studying the deleterious effects of platforms.

A better tech future is one where diverse and interdisciplinary leaders are moving the needle across both design and governance solutions—whether it's young people, leaders from marginalized backgrounds with lived experience of technology's harms, or those with interdisciplinary and creative backgrounds who are able to think out of the box, cultivate empathy, and think beyond binaries to allow for nuance and new alternatives. In other words, those who can imagine beyond the status quo.

In your opinion, what are the most important issues in Responsible Tech today?

This is a tough question to answer given the way issues intersect. One area I am particularly motivated to address in my work is misinformation because it has implications for our information ecosystems, our democracy, the integrity of our elections, public health, personal and community wellbeing, our environment—the list goes on. And we've seen the ways in which viral misinformation can lead to tremendous harm. I also think whereas there is of course a cultural dimension to the issue, we can address a good amount of it from a design perspective.

We need to reconsider what we optimize for in designing and governing our platforms—truth over outrage, critical thinking over engagement at all costs, slow and steady over quick and viral. Then, there is a huge education

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component. How do we, from a cultural perspective, become thoughtful and critical consumers of information? I'm really inspired by programming that looks at this educational hurdle from a creative perspective--whether it's leveraging storytelling, arts, documentary or podcasts.

Which individuals or organizations do you believe are doing impactful work in building a better tech future?

I am inspired by organizations who I'd say are providing a core infrastructure for the Responsible Tech movement – whether it's the Institute for Strategic Dialogue and Atlantic Council, both leading cutting edge research in the realm of technology, extremism, and mis and disinformation, Tech Policy Press offering a home for discourse on Responsible Tech issues and spotlighting new voices, New_Public thinking about thriving digital spaces or Accountable Tech working towards platform accountability. I also think there is a band of youth-led or youth-focused organizations doing really incredible work in service of moving us towards a better digital future – to name a few organizations here: Encode Justice, Cyber Collective, Log off Movement, Gen z for Change, PrivaZy.

Connect with Emma Leiken @emma_leik

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-Emma Leiken, Chief of Staff, Programs at Omidyar Network

Emma Pirchalski

AI Governance at PwC



Tell us about your role:

I help data science and business teams at PwC build AI responsibly. Currently, I work on the AI Governance team for PwC Products & Technology, to support the strategy and execution of governance across AI and machine learning assets in the US. This includes creating documentation aligned to regulation and ethics principles, delivering training that promotes collaboration across stakeholders, and serving as trusted advisors to teams as they face complex challenges. As an

early driver of this program in January 2022, I've had the opportunity to work with leaders across PwC to understand organizational goals around responsible AI and align these to business and data science capabilities.

How did you pave your career in the Responsible Tech field?

My interest in Responsible Tech began during my undergraduate studies at Penn State, learning how technology was transforming business and ultimately changing

the world. Eager to connect with others on this topic, I worked with a professor in the business school to engage students in conversations around ethics and the impact of technology. We built a case competition team focused on solving technology and business challenges through ethical frameworks, bolstering this community at Penn State. I then went on to join PwC's Consulting practice and met with teams building and researching responsible AI. I found that Responsible Tech was a big focus for the firm, and as a result had the opportunity to work on several projects, from building Responsible Technology training for college students to writing a research paper on unfair bias in AI. This has led me to my current role on the Products & Technology AI Governance team.

What advice would you give to college & grad students looking to be involved in the Responsible Tech ecosystem?

Get engaged! The Responsible Tech ecosystem brings together a diverse, unique, and passionate group of individuals dedicated to improving technology and its impact on humanity. I'm increasingly inspired by the perspectives and experiences across this community - taking the time to engage with people in this space will help prompt ideas and reveal unexpected opportunities.

It's never too early to start! From the student in the classroom to the data scientist with their hands on the keyboard, the Responsible Tech ecosystem needs everyone to be involved. Identify communities, projects, ideas, and other passionate individuals that are curious about Responsible Technology. Harnessing these experiences can help build confidence and grow curiosity.

What skills have you found most valuable in your current role?

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Being comfortable and excited by ambiguity! The process of building a new team and approaching a concept with relatively uncharted territory presents both opportunities and challenges. People, organizations, and even nations define Responsible Technology differently, and at times may propose competing standards or definitions. This can make it challenging when deciding what to orient to. However, I've found that viewing this ambiguity as an opportunity for creativity and reflection allows us to build processes that can be challenged, iterated on, and improved.

To me, a better tech future is simply one that helps us reach a better future for humanity. The future is not just technology, but technology as a means for creating a better world. This prompts us to consider the values and collective goals we want to be striving for when developing and using technology. Engaging diverse stakeholders, challenging systems and success metrics, and defining what a better future looks like are critical pieces to building this path.

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-Emma Pirchalski, AI Governance at PwC

Evagelia Emily Tavoulareas

Managing Chair, Tech & Society, Georgetown University



Tell us about your role:

At the moment, I wear several hats. My primary and full-time hat is as Managing Chair of the Georgetown Initiative on Tech & Society — a whole-of-campus effort to create novel approaches for interdisciplinary collaboration, research, and education. I also teach at the McCourt School for Public Policy, and the Capitol Applied Learning Labs. Finally, I am a Research Fellow at the Siegel Family Foundation, where I am doing a comparative study on different approaches to teaching

about digital technology in schools of public policy and law.

How did you pave your career in the Responsible Tech field?

By accident. I studied government and international affairs, and my first job out of grad school was designing and implementing programs for women in the Middle East—specifically in the Gulf. As an early adopter, I pulled emerging digital technology into my programs and quickly noticed that those products were clearly not designed for the people or context I

was working in. That observation drew me to product, where in pursuit of understanding how design/product decisions are made, I took on roles as a product manager. After several years in product, I had an opportunity to bring my product skills into government in the summer of 2013. To make a very long story short: I had the fortune of working with incredible people, and got to help stand up the first agency-level team of the U.S. Digital Service (at the Department of Veterans Affairs) and work at the White House Office of Science and Technology Policy— an experience that changed me forever.

You do **not** need to be a technologist to provide value. Every single success I can point to in government happened because we were working with policy experts who enabled our work and championed our approach. One way to think about it...consider which you prefer:

1. Do you want to be the expert on the technology, or process, or methodology? The one who has sharp skills that you can point at any number of problems? OR
2. Do you want to be the policy (or subject-matter) expert who deeply knows an issue / problem / context, and can work WITH technologists to create impact?

Either way, make sure you understand (at least at a basic level): what a digital product is and how it comes to be.

What advice would you give to others looking to build a similar career?

Find people near you who work in this space, reach out to them, go to events, and start connecting. Better yet, find a local Code Brigade and volunteer. Everyone can do something valuable.

Where do you see the future of Responsible Tech headed?

Continued on next page

I think a lot about the role the process of product development plays in the, frankly, dystopian realities that are emerging. The ethos of tech—of Silicon Valley—is both inspirational and extraordinarily...let's call it... problematic. One trait of the tech world is this obsession with "disruption", and baked in there is the assumption that the product they are creating will change things for the better... that it can only be a force for good. If the past decade has shown us anything, it is that this is consistently untrue. From the destructive impact Facebook and Twitter have had on everything from media and mental health to democracy, to the role Airbnb has played in an increasingly global housing and rental crisis, tech companies must come to terms with the unforeseen consequences of their product.

Within your area of practice, who still needs to be included in your field?

People from outside of the United States. There is so much work happening in this field in other parts of the world, yet so much of our conversation, case-studies, speakers...they are all VERY American-centered. Better yet, let's go beyond North America and Western Europe.

14. What is one major change that you would like to see in the next few years?

Sorry/not sorry, I'm giving you two:

1. I want technologists with *current, hands-on-keyboard experience* to be at the decision-making table at every level of government. Does anyone in government make a big decision without a lawyer? No. Make it a lawyer AND someone who knows a thing or two about how to program a computer or how digital products that actual humans use are designed / delivered.
1. I want universities—especially schools of public policy and public administration—to make the fundamentals of digital technology (ie. what *is* a digital thing, and how does it come to be?) part of their CORE CURRICULUM. Yea, I said it. CORE CURRICULUM. A REQUIREMENT.

Find people near you who work in this space, reach out to them, go to events, and start connecting. Better yet, find a local Code Brigade and volunteer. Everyone can do something valuable.

-Evagelia Emily Tavoulaareas, Managing Chair, Tech & Society, Georgetown University

Geoff Schaefer

Chief of Strategy - Applied AI Ethics Team at Booz Allen Hamilton



Tell us about your role:

I serve as the Chief of Strategy for Booz Allen Hamilton's AI Futures Group and the Applied AI Ethics team. For the AI Futures Group, I focus on modeling the drivers behind technological change to better understand the evolution of AI and its impact on society. For the Applied AI Ethics team, my core mission is to make AI Ethics more practical. This includes the development of a novel certification tool to ensure that AI systems and programs are ethical, and a new risk framework anchored

to common ethical principles. Outside of Booz Allen, I serve on the board of the New Leader program at the Carnegie Council for Ethics in International Affairs, where I occasionally host a podcast on different AI Ethics issues. I also recently completed work with CertNexus to update their Certified AI Practitioner certification.

How did you pave your career in the Responsibility Tech field?

I got into this space somewhat accidentally (which is not uncommon) after carving out a

fairly eclectic career across the Intelligence and Financial sectors. But in 2018, I decided that I wanted to focus on something that could provide direct impact to others - and that I could build on for the rest of my career. AI seemed like the most compelling avenue but I didn't have a technical background. But the more I read, the clearer it became how much work there was to do on the non-technical side of AI. Issues like technology policy and trustworthy algorithms were not only becoming more visible, but imperative. That's when I made the connection with my background in the humanities that could help me contribute to these critical issues. My initial focus was on AI policy, understanding how legislation and regulation could foster AI's development while placing guardrails on its downside risk, but I quickly gravitated to the ethical dimensions of AI, inspired by the fusion of philosophy and technology, and seeing a major opportunity to make ethics more relatable and practical to leaders and AI practitioners alike.

What skills have you found most valuable in your current role?

I think the two most important skills in this space are analysis and creativity. Quality analysis helps us break down the most critical issues into their root causes, and identify their second and third order consequences. The most important dimensions of a problem reside far beneath the analytical surface and, like a Paleontologist, we must dig for them. Examples include the nuanced ways that bias manifests in a dataset, and ensuring that human-machine teams produce outcomes greater than the sum of their parts.

The second critical skill is creativity. This is not only crucial to analysis (helping us connect dots across disparate domains and research) it's essential for making tangible progress against the major challenges in the field.

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And the more cross-disciplinary a problem set is, the more creativity is required to solve it. Returning to human-machine teams as an example, this is a concept that requires an understanding of behavioral psychology, human factors, UI/UX, neuroscience, and more. Tying those disciplines together, and mining them for solutions, requires a leap (or two) of imagination. But this is where the work of Responsible Tech becomes fun. Think: Pixar meets Philosophy.

What advice would you give to others looking to build a similar career?

I would recommend three things: (1) Read widely and voraciously. The Responsible Tech space - and AI Ethics in particular - is highly cross-disciplinary. The more you read in science, technology, history, etc., the better served you'll be in understanding the issues and contributing valuable solutions. And we need to be more solution-oriented in the field. (2) Develop your own independent opinions. The field is still nascent, with all the attendant challenges; we need new and diverse ideas and perspectives to creatively solve them. (3) Build meaningful relationships with practitioners across this space. You'll learn so much with each and every conversation. And the more networked we are, the stronger our collaboration will be across the field. Finally, I think it's important to emphasize that there is a place for everyone who wants to contribute. Our work will impact more people in more positive ways the more inclusive we are - across sectors, backgrounds, and experiences.

What is one major change that you would like to see in the next few years?

One thing I discuss quite frequently is the field being in a paradoxical state. There is an increasing number of organizations and voices focusing on ethical issues, bringing highly valuable visibility and legitimacy to the space. On the other hand, I feel like many of the articles, books, and podcasts focused on AI are stuck talking about the same issues - bias, transparency, etc. - in the same ways. We've seen a number of ethical principles and thought pieces released, but less practical guidance on how to operationalize AI Ethics. To be sure, none of this is easy. But I look forward to seeing more bold, creative solutions for problems we've become highly adept at identifying. There's a hunger for it. Leaders care about building Responsible Technology but, in many cases, they simply don't have the tools to do so. That's where we can have the biggest impact.

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-Geoff Schaefer, Chief of Strategy - Applied AI Ethics Team at Booz Allen

Ilana Golbin

Director, Responsible AI Lead at PwC



Tell us about your role:

I lead the development of perspectives, services and capabilities for responsible AI. For the past 6 years, I have worked with a global team spanning a dozen countries to identify ways we can support our clients in their procurement, development, and usage of AI systems. A primary function of my job is research: what are emerging methods to secure our AI systems or enable them to be more fair, more explainable, or more trusted? Where can we borrow and extend from existing

governance methods and ethics practices? How do we build trust between users, builders, and policy makers regarding AI systems?

What skills have you found most valuable in your current role?

Fortunately, there are many interested stakeholders within an organization looking to advance Responsible Technology practices. To do so effectively requires collaboration across teams with different skillsets and backgrounds. Technical teams (analytics, product groups, software development),

compliance teams (privacy, ethics, legal), and business teams must work together to design the right mix of oversight mechanisms, controls, and standards.

Collaboration is not easy – someone needs to be able to communicate with each group, having enough technical depth and enough understanding of compliance and governance to speak in a language each team will understand, translating where needed. Interestingly, the same terms could mean different things to different groups (for example “accuracy” which means “performance accuracy” to development teams and “data accuracy” to privacy teams, or “bias” which to technical teams is a statistical measure of disparity compared to a legal definition of discrimination to compliance teams). Communication is how we bridge the gap.

Where do you see the future of Responsible Tech headed?

My ideal future is that Responsible Tech is embedded in everything we do – how we design and scope systems, how we build, who we buy from, what we use, how we maintain. We consider how people and systems will use technology and consider the downstream consequences before we build. In this ideal future, we do not have dedicated Responsible Technology people. It is a shared responsibility. However, the reality is that these are hard problems, and someone needs to think about better ways to build technology, asking “should we build this?”, and looking out for unexpected harms. It is my belief that these practices will become more important to every organization in the AI and technology value chain.

What are the misconceptions about your role?

That technology can solve the problems that we raise, like those around bias and understanding. Or even more broadly

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that the issues we face in building equitable and ethical systems are in fact solvable (or already solved) problems. Most of the challenges we see come from the desire to use technology in a specific way, using available data that does not reflect the world as it really is — these are fundamentally human problems and not technological ones. Available tools on the market cannot solve for a poorly scoped or designed use case. Risks around technology can only be solved by a robust governance process that enables frank conversations about what we build, why, for whom and by whom, and overseen accordingly.

In your opinion, what are the most important issues in Responsible Tech today?

There are many issues as technology has real, lasting impacts on many people and society at large. A few come mostly to mind: overstating the impact and benefit of technology, insufficient oversight of technology, and the lack of engagement with people impacted by technology use. There are many in the AI and technology ecosystem who profit from unrealistic expectations applied to tech. Inadequately representing the limitations of systems hides how they are designed and expected to be used, enables the use of tech in inappropriate ways, and limits the ability to effectively govern and oversee technology. And, because increasingly we build socio-technical systems and not discrete technology with limited impact, it will become more and more challenging to appreciate downstream unintended consequences without participatory technology development.

My ideal future is that Responsible Tech is embedded in everything we do – how we design and scope systems, how we build, who we buy from, what we use, how we maintain. We consider how people and systems will use technology and consider the downstream consequences before we build.

-Ilana Golbin, Director, Responsible AI Lead at PwC

Jason Steinhauer

History Communication Institute



Tell us about your role:

I'm an author and public historian who studies how information / disinformation about history circulates online, and how the Web shapes what we know about the past. I wrote a book on the subject called "History, Disrupted: How Social Media & the World Wide Web Have Changed the Past," and have also founded an organization devoted to these questions, called the History Communication Institute.

How did you pave your career in

the Responsibility Tech field?

I began my career in museums and then transitioned into government, academia and think tanks, including a stint at the U.S. Library of Congress. In each place, I saw how the Web and social media were shaping what people thought they knew about history. I realized there was a bigger story about how our technologies were shaping our perceptions of the past and wrote a book about it, called "History, Disrupted." But we still have much to understand in this area, and part of our task now is to build bridges

between historians and technologists, to wrestle with these questions and devise solutions that make the Web a better and more accurate place for history.

How has the field evolved and improved?

Mine is a very new field; I'm one of a handful of people around the world working at this intersection between history and tech. Along with these colleagues, we've coined a term for this new field--called History Communication (modeled on Science Communication)--and we are working to grow it globally. One of our goals is to develop History Communication coursework in colleges and universities; we want students majoring in history, journalism, media studies, communication, tech and other fields to think critically about how the Web shapes what we know about history, and how information / disinformation about history fits into the larger story on mis/disinformation. We also want to commission research studies and white papers that examine how governments, media, disinformation agents and others manipulate history online. We're doing all this through the History Communication Institute.

Within your area of practice, who still needs to be included in your field?

You! If you're reading this, we need you involved with the History Communication Institute and History Communication. Our history belongs to all of us, and each of us has a role to play in creating a better online ecosystem for accurate and well-researched history. The History Communication Institute has a Slack workspace, and I invite everyone in tech, media, design, AI, government, academia and all related fields to join us. It's a great conversation, and will be made better with your input!

In your opinion, what are the most important issues in Responsible Tech

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today?

The Web has disrupted the entire profession of history. With so much history content available online for free, we've seen dramatic cuts in funding to professional historians in museums, universities, and state historical societies. History is in peril, and tech has been a significant factor. A related issue is inequality in who benefits from tech, and who gets left behind. There is much inequality in terms of access, capital, skills, etc., and I worry these gaps are only widening as tech becomes more sophisticated. Another concern is data; our devices are extracting so much data from us and about us; how that will be used to create even more addictive technologies is very concerning. Finally, I worry that Responsible Tech might become an echo chamber. Governments, corporations, law enforcement, small businesses, social media influencers, historians, humanities scholars and people of all political persuasions need to be part of the conversation.

What is one major change that you would like to see in the next few years?

I'm hopeful there will be more historians and humanities scholars invited into the Responsible Tech ecosystem and working with tech companies over the next few years. Historians and humanities scholars have much to offer the conversation; not solely thinking about historical information/disinformation online, but also examining the history of tech itself and how mistakes that were made in the past can be avoided in the future. I envision a world wherein humanities scholars work in collaboration with engineers and platform designers to create more ethical tech products, and I believe that the All Tech is Human community can help us make that world possible by fostering connections and bringing these issues to broader attention.

15. Looking ahead, what makes you optimistic that we can build a better tech future?

The people. I've always placed my faith in people, and there are many talented and dedicated people working in tech who want to make a better world. If we work together, I know we will succeed!

Connect with Jason Steinhauer @JasonSteinhauer

Historians and humanities scholars have much to offer the conversation; not solely thinking about historical information/disinformation online, but also examining the history of tech itself and how mistakes that were made in the past can be avoided in the future. I envision a world wherein humanities scholars work in collaboration with engineers and platform designers to create more ethical tech products.

-Jason Steinhauer, Founder, History Communication Institute

Jigyasa Grover

Senior ML Engineer at Twitter, Book Author, and AI & Open Source Award Winner



Tell us about your role:

I am a Senior Machine Learning Engineer at Twitter, where I have been working in the Online Ads Prediction & Ranking domain for close to 4 years now. I am spearheading a variety of ML projects that are directed toward increasing the revenue for the company while enhancing the advertiser and user experience on the platform. I am involved in areas like ML modeling, feature engineering, and most recently privacy-preserving aspects of data and the algorithm due to the

increasing regulations and data protection laws.

What advice would you give to college & grad students looking to be involved in the Responsible Tech ecosystem?

One of my top pieces of advice will be to hone your technical know-how and find yourself opportunities to work in multiple realms for you to gain enough experience be it in the form of internships, volunteering, curriculum, and so on. These varied exposures will help you decide on your domain of

expertise. For students particularly interested in Responsible AI, like budding data scientists, engineers, ethicists, lawyers, etc. put in the effort to read up on the principles and devise ways how you can implement them in practical life. I always believe in the fact that ideas are nothing without implementation, so make sure you hone those execution skills and build your portfolio accordingly!

What skills have you found most valuable in your current role?

Being an ML engineer in the industry, I feel having a problem-solving mindset is important topped with fundamental skills like software engineering, system design, and data modeling. As I am growing in my career, I am realizing that domain knowledge plays a pivotal role in thinking through the problem and coming up with effective solutions. Another useful skill is the art of storytelling which involves communicating one's approaches by articulating the problem, end-to-end solution backed with data-driven analysis, and providing actionable insights.

Within your area of practice, who still needs to be included in your field?

The last handful of years has seen immense evolution in the composition of the tech workforce. Acknowledging the progress made in the field of AI and ML, we still have a long way to go. Including people from different backgrounds, not only in terms of race, color, and gender, but also in their fields of work like ethics, philosophy, marketing, and so on is sure to bring about a diversity of thought in practice which is much needed for well-rounded innovation.

In your opinion, what are the most important issues in Responsible Tech today?

Technology is touching every aspect of

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our life and in a way shaping humankind in the present era. With its significance augmenting each passing day, it is highly crucial to have certain checks in place to promote its ethical growth and avoid socio-economic damage to society. Especially with modern-day AI systems, even a slight crack in their design can lead to disastrous outcomes propelled by cyber-attacks, reverse engineering, and leakage of sensitive data like personal conversations, financial transactions, medical history, and so on.

Therefore, it is imperative to retain the confidentiality of data, maintain the privacy of proprietary design, and stay compliant with the latest regulations and data privacy policies.

Connect with Jigyasa Grover @jigyasa_grover

One of my top pieces of advice will be to hone your technical know-how and find yourself opportunities to work in multiple realms for you to gain enough experience be it in the form of internships, volunteering, curriculum, and so on. These varied exposures will help you decide on your domain of expertise. For students particularly interested in Responsible AI, like budding data scientists, engineers, ethicists, lawyers, etc. put in the effort to read up on the principles and devise ways how you can implement them in practical life.

-Jigyasa Grover, Senior ML Engineer at Twitter

Joe Toscano

Author of Automating Humanity, featured in the Social Dilemma



How did you pave your career in the Responsibility Tech field?

I left my role consulting for Google, sold everything I owned, packed up my Accord coupe, and started giving talks anywhere that would have me, helping inform the public of the abuses of Big Tech and what we need to do to make change. My grassroots impact started with talks and has since turned into me publishing a book (*Automating Humanity*), being featured in *The Social Dilemma*, advising AGs on antitrust in the attention economy, and much more. Looking back, that

decision to throw everything away and risk not being hire-able was one of the scariest decisions I've ever made but I can confidently say that I wouldn't do it any differently if I had the chance.

What advice would you give to others looking to build a similar career?

Give unconditionally. This work can't be done by any one of us, it's going to take an army. Share opportunities, it will come back to you later—I promise.

Where do you see the future of Responsible Tech headed?

I see incredible overlap and parallels between data and the finance industry. I believe there will be a new role emerging in the next 3-5 years I'm calling CPA-D—a Certified Public Accountant of Data. These individuals will be certified as any accountant would be but rather than financial management and advice, these people will be capable of auditing and advising companies data operations.

What does a better tech future look like to you?

A better tech future is one where companies behave with integrity—where their policies and documentation match their actions, and their actions match the words they claim in press releases and marketing statements. Integrity, in my opinion, is the key to a better future.

What is one major change that you would like to see in the next few years?

I'd love to see a Federal Privacy bill in the United States that gives our nation a legal floor to guide industry behavior yet still allows States to create additional layers they believe are necessary to protect their citizens and push the Federal bill forward, over time, through experimentation and validation of impact.

Connect with Joe Toscano @realjoet

Kathleen Carroll

U.S. Digital Corps Design Fellow



Tell us about your role:

I'm a U.S. Digital Corps Design Fellow working at the Department of Health and Human Services on the InnovationX team. I use human-centered design to drive innovation and inform policy and service changes. I aim to improve the experiences of people seeking diagnosis, treatment, and care for their health and wellbeing.

How did you pave your career in the Responsibility Tech field?

I've always felt drawn to work that

promotes equity and impacts my community as a lifelong resident of Boston. I completed my graduate program in August 2020 and I used my technical skills to address my city's needs in the midst of the COVID-19 pandemic, despite my limited public health knowledge. I saw an opportunity for impact with people seeking information, resources, and support from their city.

I began working at the Boston Public Health Commission in the Office of Public Health Preparedness. In my two years

there, I designed educational modules, webpages, and portals to build community resilience. This experience bolstered my knowledge of public health and human services, and validated my assumption that there is an immense opportunity to use design and technology to improve people's experiences and interactions with their healthcare providers and governments.

What advice would you give to college & grad students looking to be involved in the Responsible Tech ecosystem?

When I was a student, a great professor encouraged us to practice setting a word of intention for each semester. I paired this with a list of tangible goals related to that intention. I found that when I vocalized these goals to my professors and peers, they were eager to help me find paths to accomplishing them, would send me resources and opportunities related to them, and would often find ways to help me integrate them into my coursework. I made this a habit each semester. This practice helped me stay grounded in my intentions and gave me agency over my accomplishments throughout my program.

What skills have you found most valuable in your current role?

A skill that I'm continuously learning is to advocate on behalf of users' needs. It can be tricky to navigate situations with stakeholders who, for many reasons, may have clashing interests with the people who will be most affected by their decisions. As a designer, I represent the people who aren't at the table when decisions are made, so it's vital to voice their opinions to stakeholders and senior leadership. Learning to be assertive while communicating the needs of others is a vital skill in these situations.

Within your area of practice, who still needs to be included in your field?

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In healthcare, and in technology, people in power tend to create the standard practices of their respective fields, upholding and reinforcing inequalities and maintaining existing power structures. Because these positions of power tend to be less diverse than the people they serve, and if standard practices are not created with the involvement of diverse groups or with equity in mind, this can result in harm for people in excluded populations. It's vital to not only offer people with diverse backgrounds a seat at the table, but to create equitable environments where they are respected, their perspectives are valued, and they're given opportunities to succeed. As a person with privilege, I am constantly working to be a better ally and advocate for the needs of others.

What are the misconceptions about your role?

When most people hear the word "designer" they think of visuals, and assume I work on creating graphics or user interfaces. Many people don't know that "design" also refers to the process by which products, from visuals, to apps, to services, are created. In human-centered design, this process requires each design choice to be made with the user's perspective in mind. When I talk about my day-to-day work, many people are surprised by the amount of research I do, from reading case studies to performing ethnographic interviews and observations. I love to help people understand the role of a designer beyond visuals.

Looking ahead, what makes you optimistic that we can build a better tech future?

As a U.S. Digital Corps Fellow, I'm one of 38 early-career technologists working across 12 federal agencies to make a more equitable and effective government. My colleagues are using their professional expertise and perspectives to improve the public's interactions with the government. Being able to work alongside such an energized, supportive, and talented group of Fellows, it is clear that we will have a profound impact on the government's delivery of services - and we're just the beginning. The civic technology space is growing, and I think that the diverse and impassioned people working in it will continue to drive innovation and use technology to promote equity and the well-being of the public.

The civic technology space is growing, and I think that the diverse and impassioned people working in it will continue to drive innovation and use technology to promote equity and the well-being of the public.

-Kathleen Carroll, U.S. Digital Corps Design Fellow

Katie Harbath

CEO of Anchor Change



Tell us about your role:

I currently work for myself doing a variety of projects for organizations at the intersection of technology and democracy. This includes fellowships at the Bipartisan Policy Center, the Integrity Institute, Atlantic Council, National Conference on Citizenship and the International Republican Institute. My work specifically focuses on how tech companies protect the integrity of elections on their platforms as well as their content policies.

How did you pave your career in the Responsibility Tech field?

My career started in the early 2000s running digital campaigns for the Republican party. I then spent 10 years at Facebook where I built and led global teams that managed elections and helped government and political figures use the social network to connect with their constituents. This work included managing the global elections strategy across the company by working closely with product teams to develop and deploy civic engagement and election integrity

products including political ads transparency features; developing and executing policies around elections; building the teams that support the government, political, and advocacy partners; working with policymakers on shaping the regulation of elections online, and serving as a spokesperson for the company about these issues. It was at Facebook where I started to get more into the integrity field and I am continuing that work mainly through the Integrity Institute.

What advice would you give to college & grad students looking to be involved in the Responsible Tech ecosystem?

Nearly every job I've had in my career never existed before I created it. This is true for the Responsible Tech ecosystem which has exploded in the last five years and will continue to grow and evolve. For those that want to get into this line of work I highly recommend spending time working at a technology company on integrity and/or content policy issues. There is no better learning ground for the really hard tradeoffs and decisions that companies face every day. It's also worth getting experience in policymaking as well through a job or fellowship in a state legislature or Congress. TechCongress is a great fellowship to consider for that. Finally, read a lot. There are a ton of amazing people writing and talking about these topics.

Looking ahead, what makes you optimistic that we can build a better tech future?

Just the fact that we are having these conversations in the open gives me great hope. We are in the middle of a massive transformation in how we consume content online. This means we are rewriting societal norms and laws for how we hold people accountable for what they say and do on the internet. By having more people involved in Responsible Tech work and sharing their

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experiences we can learn from the lessons of the past to build the future we want to have.

Which individuals or organizations do you believe are doing impactful work in building a better tech future?

I continue to be inspired by my colleagues at the Integrity Institute who are the engineers, data scientists, researchers, analysts, and policy experts that have or currently work at the platforms on integrity issues. By sharing their knowledge publicly they are helping policymakers, civil society, academics, and the media better understand the challenges this work faces every day. Moreover, some of the most impactful work is still happening at the platforms themselves. There are thousands of people doing the hard work every day to make difficult decisions, invent new ways to prevent harm, and write policies.

Just the fact that we are having these conversations in the open gives me great hope. We are in the middle of a massive transformation in how we consume content online. This means we are rewriting societal norms and laws for how we hold people accountable for what they say and do on the internet. By having more people involved in Responsible Tech work and sharing their experiences we can learn from the lessons of the past to build the future we want to have.

-Katie Harbath, CEO of Anchor Change

Nina Jane Patel

VP of Metaverse Research at Kabuni



Tell us about your role:

I am the co-founder and VP of Metaverse Research for Kabuni - on a mission to unlock the design potential in every child, and elevate life. We are dedicated to providing the safest space in the Metaverse for kids aged 8-16 to LEARN, GROW & EXPLORE - within a classroom environment and at home. Designed for children to improve retention, engagement, speed, and health - based on our unique, evidence-based methodologies. Prioritizing safety and trust as a platform, Kabuni is

dedicated to intentional and meaningful engagement with technology. We are engaging educators, parents/caregivers and learners to co-create and define an evidenced-based methodology for the integration and implementation of immersive technologies into the classroom and the home.

I'm a board registered Movement Psychotherapist and a fellow with the RSA, ISPA, and APAP, Patel is a doctoral scholar and received the Wilkie Calvert Scholars award for my research - "Unlocking the Potential of Immersive Experiences

for the Future of Human Society: Investigating the physiological and psychological impact of the Metaverse for Children."

How did you pave your career in the Responsibility Tech field?

Working at the intersection of culture, mental health and technology and as an advocate for innovation, creativity, education, and mental health - I have collaborated with psychotherapists, psychologists, artists, engineers, designers, and a spectrum of specialist technologists to generate innovative projects, programs, performances and consultations to consider the how exponential technologies will alter representational forms of human movement, interaction and psychology in the near future. Examining multi-identity evolutions of human interaction within the context of a world in which virtual and physical spaces are increasingly blended.

I'm fascinated by our psychology, physiology, and human interaction within intercultural, intergenerational, and interdisciplinary explorations of a near-future of collaborations co-existing with AI, avatars, immersive worlds, telepresence, and real-time presence within creative places, and cultural environments, interactive entertainment, and play spaces and its cumulative impact.

Where do you see the future of Responsible Tech headed?

Global momentum is accelerating and there is no doubt that we are at a transformative moment for the digital safety of children. The metaverse is not yet succinctly defined, however it can be described in the following way; a set of immersive technologies that enable social connection in three-dimensional (3D) virtual universes that resemble reality. It relies on a network of 3D

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virtual worlds that utilize technologies such as virtual reality (VR), augmented reality (AR), mixed reality (MR), and haptics as well as social virtual environments, live-streaming, video-conferencing, gaming, enabled by avatars, e-wallets, blockchain and metacurrencies, and/or tokenomics.

Within this, there is potential for the usage of targeted biometric data (acquired via brain/body computer interfaces) for the development of machine learning and/or artificial intelligence. The advancement in innovation is in part due to a significant amount of investment in the development of the components of metaverse technologies. US\$120 billion has been invested in the first five months of 2022 alone (McKinsey, 2022). According to [Statista](#), the global metaverse market is worth US\$47.48 billion in 2022 and is estimated to be worth US\$678.8 billion by 2030 (Allsop, 2022).

We are at an extraordinary point in human history. We need to consider how we integrate transformative technology into the lives of children and young people today, at this nascent stage. Otherwise, we are doing CYP a disservice and not adequately innovating to meet their needs. How can we (the current adults of 2022, the gatekeepers) innovate for long-term benefit to design hardware, software and content to elevate life?

Within your area of practice, who still needs to be included in your field?

As we saw in previous shifts in technology such as the emergence of the internet followed by social media, mobile, and cloud, novel strategies can quickly become table stakes; the metaverse has the potential to impact children and young people significantly.

The paradigm shift within the technology of the metaverse is that the child is no longer experiencing the digital interaction as a third-person observer but as a first-person participant. This is achieved by 3 overarching concepts of virtual reality; immersion, presence, and embodiment. The technology has been designed and the fidelity is such that the lines between the physical world and the virtual are increasingly blurred. Examining its potential effect should be part of strategy discussions NOW, with leaders accelerating their analysis of how the metaverse could drive a very different world within the next decade.

The technology children experience today is not designed for their needs as a priority; it is often a by-product of innovation for an adult application resulting in technology that is not fit for purpose, exposing children to danger.

What does a better tech future look like to you?

Dancing with your pixels!

New methods of human connection, exciting new ways to interact, to access each other socially, removing geographical barriers, removing time, altering space around us.

Examining its potential effect should be part of strategy discussions NOW, with leaders accelerating their analysis of how the Metaverse could drive a very different world within the next decade.

As the Metaverse evolution/revolution continues, I am excited and scared at the same time. Perhaps we all are.

While the majority of us want our Metaverse experiences to be positive, informative, inspiring, insightful, educational, and more, we must also recognize that the Metaverse has the potential to harbour negative influences too.

Let's be clear. This is especially vital and urgent when it comes to our children and how their lives and long-term wellbeing will be impacted. It's a fact that the technology children experience today is not designed for their needs as a priority; it is often a by-product of innovation for an adult application, resulting in technology that is not fit for purpose, exposing children to danger with sharp edges at every corner.

Our biggest mistake today is to underestimate the power this technology holds. *How can we mitigate this moving forward?*

There is a lot of work to be done.

Connect with Nina Jane Patel at [@NinaJane_PhD](#)

M. Alejandra Parra-Orlandoni

VP, Ethical Innovation & Privacy at Takeda



Tell us about your role:

Takeda is a biopharmaceutical company that is committed to bringing better health for people and a brighter future for the world. To that end, I help Takeda harness the full potential of science, data, and technology—responsibly.

I sit within Takeda's Global Portfolio Division, which undertakes various activities, including launching and supporting the growth of transformational medicines and vaccines across therapy areas such as neuroscience,

gastroenterology, and rare diseases. These activities often involve data use, and some raise novel uses of technologies like machine learning and XR.

It's my personal mission to partner closely with our teams so that, together, we can actualize the company's purpose and unlock innovation, while staying true to our values. This involves assessing and managing risks, as well as seeking opportunities to create value, relating to data use and technological experimentation—and to strive to do so seamlessly

and effectively.

One unique thing I love about Takeda is that we're truly guided by our values of Takeda-ism, which incorporate Fairness, Honesty, Perseverance, with Integrity at the core. These values permeate the company, and we bring them to life through decisions based on Patient-Trust-Reputation-Business, in that order. This framework serves as a north star for navigating responsible uses of data and technology and helps us make decisions we can be proud of over time.

What skills have you found most valuable in your current role?

Innovation challenges benefit from innovative problem-solving. Below are three skills I've found to help with this. (Since I only recently joined Takeda, I'll share skills that have proven valuable in past Responsible Tech roles as well: at Meta working on data policy innovation with a focus on privacy enhancing technologies, digital ID, and the metaverse; and before that, at QuantumBlack, AI by McKinsey, working on the development and implementation of responsible AI practices.)

1/ Curiosity. Openness and excitement for learning go a long way in the world of Responsible Tech. Many Responsible Tech challenges have little or no precedent, so a rigid mindset can inhibit unlocking exciting solutions.

2/ Inclusivity. Responsible tech requires bridging gaps across disciplines and experiences. I've found this space to be so heavily intersectional that excluding voices can be downright irresponsible. And welcoming people with different perspectives and areas of expertise is often critical to developing robust solutions.

3/ Analysis + Synthesis + Creativity. Okay, I acknowledge that this three-in-one skill is cheating a bit—but I've found

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this combination to be a powerful one. Breaking down and processing heaps of information (analysis), recompiling information to uncover useful insights (synthesis), and injecting a healthy dose of creativity (if not yours, then your colleagues’) often leads to the most elegant solutions.

What advice would you give to others looking to build a similar career?

The first thing I’d advise is to try not to ‘over-engineer’ your career. I’ve now met dozens of Responsible Tech practitioners with diverse backgrounds, and it’s their rich and unique experiences that add so much value to this field. Try not to get too hung up on details like the title of the role or the specific team you’ll be on. Instead, identify and explore what you’re curious about, and think of ways you can make Responsible Tech practice a part of that.

Secondly, seek out managers who are supportive of your interest in Responsible Tech. Even if your role is not squarely a Responsible Tech role, it may have Responsible Tech-adjacent elements. A supportive manager may be able to make those elements a more prominent part of your role, and perhaps over time help you move into, or even allow you to design, a Responsible Tech role. Worst case: Find your own ways to build a Responsible Tech portfolio through independent projects. And in any case: Get involved in the Responsible Tech community (All Tech is Human is a great place to start!).

Finally, look for values alignment between you and any organization you’d like to be a part of. For example, a company could be building some of the coolest products you’ve ever seen. But if that company’s values don’t align with your own moral sensibilities, you’ll likely find a Responsible Tech role in that company to be frustrating, disappointing, or even a dead-end. Sometimes you must look beyond the surface to grasp organizational values. I’ve found that decision making processes, team priorities, and career growth philosophies can be helpful proxies because they reflect what is important to an organization (i.e., what it values).

The first thing I’d advise is to try not to ‘over-engineer’ your career. I’ve now met dozens of Responsible Tech practitioners with diverse backgrounds, and it’s their rich and unique experiences that add so much value to this field. Try not to get too hung up on details like the title of the role or the specific team you’ll be on. Instead, identify and explore what you’re curious about, and think of ways you can make Responsible Tech practice a part of that.

-M. Alejandra Parra-Orlandoni, VP, Ethical Innovation & Privacy at Takeda

Maha Jouini

Founder for African Center for AI and Digital Technology



Tell us about your role:

I founded The African Center for AI and Digital Technology to enhance women leadership in AI; especially, in North African communities, where AI and new tech are still considered a male field. Also, studying computing is a privilege because AI courses, tech courses (i.e. e-commerce or tech entrepreneurship) are expensive and most common Africans cannot afford it. My mission is to transfer the tech knowledge to my community and enable their understanding of AI and new

technology. My leadership style basically is creative and participatory. I am very close to my community and my team at work. I consider them as part of the process and I tend to take a personal interest in each member of the team.

How did you pave your career in the Responsibility Tech field?

It started in 2009 when I was a cyberactivist with the Amnesty International Youth Office in Tunisia. I was part of the Arab Spring 2011. I believed that

Responsible Internet was an engine of positive change in my society. I was a trainer and consultant in cybersecurity and online advocacy. In 2015, I joined The African Union campaign to end child marriage in Africa, where I worked and digital assistant to the campaign. I helped in creating online content about eradicating child marriage in Africa. In 2017, I got a scholarship to study applied technology and computer sciences in China. In 2022, UNESCO Lebanon and the Asfari Institute for Civil Society and Citizenship at AUB considered me among the top 20 women changemaker pioneers in MENA. In 2022, I began as a fellow researcher at Center for AI and Digital Policy CAIDP Fall 2022 AI Policy Clinic Research Group.

What advice would you give to college & grad students looking to be involved in the Responsible Tech ecosystem?

I have a message for women and girls, don't give up the fight! I am Muslim and I grew up in Tunisia and was raised by a conservative mother who stopped me from practicing martial arts and being a political activist. According to her, these activities belong to men and that I had to look beautiful, calm, and accept my Muslim Arab's society rules. While my mother's instructions meant well, this is a widespread perception in North Africa. It is part of the general conscience and world perception about women as a result of patriarchal society.

So we as women have to advocate for our leadership in business, particularly in technology because our society believes that TIC is for men and women are good as nurses, teachers, secretaries, or housewives. We need to fight to eradicate gender based violence and all kinds of stereotypes about African women and women in general.

What skills have you found most valuable in your current role?

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My ability to change my community's mindset. I can influence and I am able to convince, and I always tell my community that science has no color, gender, or race! We are all smart and all of us can succeed and be brilliant in the STEM field, I refer to successful African stories and African History when I want to brand my work—such as the Constitution of Carthage, c. 340 BCE ,The rise of sciences during ancient Egypt time and so on. I believe that change comes when we Africans stop underestimating ourselves and our capacities.

Where do you see the future of Responsible Tech headed?

The future of the world in front of the expansion of technology and algorithms is linked to the decisions that we will take, mainly in regards to promoting awareness about artificial intelligence ethics, internet governance, and good artificial intelligence governance. We have to support technology education in the countries of the global south through empowering the education field and making it available to everyone. Teaching technology in all disciplines and work to enhance competencies of future generations who will face unemployment if they do not learn applied technology. We also have to develop employment market policies in Africa to make it compatible with the four industrial revolutions where robots are achieving human tasks.

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-Maha Jouini, Founder for African Center for AI and Digital Technology

Rachel Gillum

Vice President, Ethical and Humane Use of Technology at Salesforce



Tell us about your role:

I lead the policy function of Salesforce's Office of Ethical and Humane Use, a team dedicated to the responsible use of Salesforce technologies. We work with engineers, employees and customers to embed ethics and inclusion in the design, development and delivery of every product.

My team advises on policies and processes to guide the responsible use of the Salesforce platform. We're tasked with developing

guardrails that uphold human rights and ensure that our technologies are not used for harm —like developing rules for how our AI products can and cannot be used and making sure we uphold the UN Guiding Principles for Business and Human Rights. This work is nuanced and complex, which is why we work with a number of external experts to ensure we consider a wide set of perspectives.

How did you pave your career in the Responsibility Tech field?

I can't say that I always planned to

be in the Responsible Tech field — namely because it did not exist when I started my career!

I actually began my career working in counterterrorism and went on to pursue a PhD in Political Science at Stanford University, where I studied the post-9/11 security environment and its impact on immigrant communities. These experiences taught me the importance of keeping human rights and civil liberties at the center of policy development — and opened my eyes to the risks of emerging technologies like mass surveillance systems.

I later worked as a consultant alongside former Secretary of State Condoleezza Rice, advising companies on how to navigate the geopolitical risks associated with emerging technologies. I learned to anticipate what can go wrong with many of these technologies and how to craft plans to mitigate those risks — a skill that I carry with me today in my role at Salesforce.

What advice would you give to college & grad students looking to be involved in the Responsible Tech ecosystem?

The Responsible Tech field is exciting and still relatively new — and there is no one path to landing a career in this space. One practical piece of advice I'd give students is to take the time to explore and understand the backgrounds of those already working in this space. Consider how your interests could be a good match for this work, and what skills and experiences you can pick up to strengthen your credentials in this space.

And of course, it's always important to network. In this small but rapidly growing space, being plugged into the community will be informative, beneficial, and hopefully fun! I've met some incredibly smart and fantastic humans over the course of my career.

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What career pathways and/or opportunities do you foresee in the field?

Responsible tech is a new and rapidly growing field, and I expect to see many more jobs in this space over the next couple of years. Ethical tech is no longer just the right thing to do, it's something that consumers and the wider public now expect from tech companies. And they will hold companies accountable if they fail to deliver on their responsibility.

The tech industry needs dedicated experts who can help companies navigate these increasingly complex issues — and that means lots of opportunities for those interested in Responsible Tech.

Looking ahead, what makes you optimistic that we can build a better tech future?

While we still have a long way to go, I'm encouraged to hear that conversations about responsible and ethical tech have reached the highest levels of policy-making.

I currently serve on the U.S. Chamber of Commerce's AI Commission, where we are working with government, industry, and civil society leaders to develop recommendations for AI guardrails and policies that will allow us to unleash the positive potential of AI — while also protecting the rights of every human being. As part of this process, we've conducted field hearings across the country and the UK to hear firsthand from top researchers, engineers, and advocates on this topic, and the discussions have been really energizing.

Advancing Responsible Tech will ultimately take the public and private sectors working together, and it's great to see leaders approaching this space with intention — and putting equity and inclusion at the heart of emerging technology.

Connect with Rachel Gillum @RachelMGillum

The Responsible Tech field is exciting and still relatively new — and there is no one path to landing a career in this space. One practical piece of advice I'd give students is to take the time to explore and understand the backgrounds of those already working in this space. Consider how your interests could be a good match for this work, and what skills and experiences you can pick up to strengthen your credentials in this space.

-Rachel Gillum, Vice President, Ethical and Humane Use of Technology at Salesforce

Ravit Dotan

VP of Responsible AI at Mission Control, Responsible AI Advocate at Bria.ai, and independent researcher and advisor



Tell us about your role:

I work to make technology safe and beneficial, especially AI. To that end, I am active in industry, academia, and the non-profit sector. I focus on how to operationalize AI ethics, i.e., how to move from theory and principles to action. My projects include conducting research to figure out how to operationalize AI ethics, helping tech companies increase their AI ethics maturity, helping investors incorporate AI ethics in their investment strategies, and democratizing AI ethics by writing a

and speaking to the general public.

I conduct this work under several professional hats. I am VP of responsible AI at Mission Control, Responsible AI Advocate at Bria, a grant-funded researcher, Writer for The Montreal AI Ethics Institute, and AI Ethics Advisor at MKAI.

What advice would you give to college & grad students looking to be involved in the Responsible Tech ecosystem?

Engaging with people who work on Responsible Tech in the industry

can be pivotal for academics that are looking to get involved. Coming from an academic background myself, I notice that academics can have misconceptions about the needs of the industry. A better understanding of these needs can pave the way for more research projects that are attuned to the industry and smoother transitions into industry from academia.

What are the misconceptions about your role?

People often think that working in tech ethics requires having an extensive technical background and/or dictating ethical decisions to others.

However, first, people with non-technical backgrounds are invaluable to tech ethics. Non-technical backgrounds, such as humanities or social science backgrounds, can be a big advantage. People with these backgrounds are well-positioned to help understand the social, political, environmental, and other impacts of tech, clarify concepts such as fairness, bias, and privacy, analyze trends in tech ethics, and so on. While these tasks require some technical understanding, they don't require a degree in computer science or other forms of extensive technical training.

Second, while some positions may require making decisions about what is ethical, many do not. For example, I often see my role as helping practitioners build their skills so that they can make better-informed decisions. That includes helping them notice the social and political dimensions of their work and illustrate how they can think through difficult issues. I do not see myself as an authority who can or should dictate what the ethical thing to do is.

In your opinion, what are the most important issues in Responsible Tech today?

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In my opinion, the most important issue in Responsible Tech today is moving the ecosystem from talk to action. Surveys show that many companies have tech ethics guidelines and principles, but few act on them. Moving from talk to action includes motivating companies to do so and building more tools that can help them. There are many ways to create those. For example, motivation can come in the form of public pressure. NGOs, journalists, blog-writers, and others can raise awareness of tech ethics, praise companies that take active steps to make their technology responsible, shame those who do not, and promote tools for Responsible Tech. Building more tools for Responsible Tech can happen in many ways too. For example, for-profit companies that build in-house tools to solve tech ethics problems can make them available to others, as some already do.

Looking ahead, what makes you optimistic that we can build a better tech future?

I am encouraged by the amount of excitement and motivation around tech ethics. Many people are interested and want to get involved in various ways. There are so many podcasts, webinars, blog posts, tech ethics tools, and other resources that people create in their spare time. A high level of engagements from many people is exactly what we need to push the ecosystem in a better direction.

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-Ravit Dotan, VP of Responsible AI at Mission Control, Responsible AI Advocate at Bria.ai, and independent researcher and advisor

Reid Blackman

CEO of VIRTUE



Tell us about your role:

I'm the Founder and CEO of Virtue, a digital ethical risk consultancy. When I'm not reading research or writing on digital ethical risks, I'm advising board members and members of the leadership team on devising and implementing AI ethical risk programs. That can include helping them articulate ethical principles in a way that's actionable, speaking and giving workshops to spread and deepen organizational awareness, or advising on AI ethical risk best practices: from ethics committees

to bias detection to monitoring AI in the wild and much more.

How did you pave your career in the Responsibility Tech field?

I was a philosophy professor for 10 years. Prior to that was grad and undergrad. So I've been researching, publishing, and teaching ethics for 20+ years. AI ethics, and digital ethics more generally, is just another application of that experience and research.

What advice would you give to

college & grad students looking to be involved in the Responsible Tech ecosystem?

I'd first think about where you want to fit in. First choose whether you want to build tech that directly aims to have a "positive social impact" (e.g. serving the underserved in some capacity) or if instead you're someone who wants to make sure ethically bad things don't happen in the course of innovation more generally. If the latter, now think about whether you want to get involved in your capacity as a member of government, of industry, or as an activist. Then think about whether you want to get involved at the governance level (e.g. policies, procedures aimed at mitigating ethical risks of tech) or if instead you want to be at the technical level (e.g. designing quantitative approaches to various problems, e.g. bias in AI). Those distinctions aren't exhaustive and there can be overlap, but they should help someone identify where they want to be in 2-10 years.

Where do you see the future of Responsible Tech headed?

I'm not sure where it's headed, but I have a view about where it needs to go. The governance of technologies needs to be more proactive and broader than it is now. AI ethics is getting a lot of play today, and that's a good thing, but quantum computers, blockchain, AR/VR, and more technologies will increasingly be developed and deployed on the unsuspecting masses. The ethical risks of those technologies, let alone the risks generated by combining them, is not only not fully appreciated at the moment, but virtually no one is thinking about mitigating those risks proactively and in a systematic manner. In the coming years I'd like to see less AI ethics strategies and more digital ethics strategies, where the latter includes the former and a whole lot more.

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What does a better tech future look like to you?

We need regulations requiring certain kinds of digital ethics governance and for those regulations to be complied with by industry. It would be helpful if, for instance, there were cross-industry standards about what existing or new role should own digital ethical risks, what kinds of decisions organizations need to be transparent about, what an acceptable cross-functional team looks like in the assessment of high risk applications of technologies, etc. In an ideal world, these regulations would draw from those that speak to ethical risks in medical research on human subjects (including, especially, regulations relating to IRBs), but I'm not particularly hopeful that will happen.

Looking ahead, what makes you optimistic that we can build a better tech future?

I've witnessed interest and action increase year over year by startups and enterprise over the past 4-5 years. That is in no small part because members of the tech community and the general citizenry are pushing them, and that contingency is growing every day. Part of what explains that growth is the fact that companies continuously go ethically awry with their tech, and since I don't anticipate that stopping any time soon, I anticipate continuous reasons for more and more people to get involved and push for change.

Reid Blackman is the author of *Ethical Machines: Your Concise Guide to Totally Unbiased, Transparent, and Respectful AI*. Connect with him at [@reidblackman](https://twitter.com/reidblackman)

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-Reid Blackman, CEO of VIRTUE

Siva Mathiyazhagan

Associate Director of SAFELab, University of Pennsylvania



Tell us about your role:

My primary responsibilities as a social media researcher are to lead interdisciplinary research teams and community partners to co-build, test, and disseminate community-centered interpretation tools for social media posts by BIPOC communities to reduce negative digital footprints. As an Associate Director of SAFELab, I co-create transdisciplinary research strategies and facilitate global collaborations to promote community-centered digital interventions to reduce racial and

caste bias in emerging technologies. I also co-develop social work tech policy recommendations for AI/ML and Metaverse. Overall, I apply a social work lens to emerging technologies to humanize tech and data to reduce harm and bias through practice-based education, evidence-based research, and people-centered policy.

How did you pave your career in the Responsibility Tech field?

My early career research was focused on community-based child participation and protection

mechanisms. The rapid rise of young people's engagement online and its real time consequences on youth, family, and their communities shifted my focus around historically marginalized youth wellbeing online. Prof. Desmond Patton's work has been a major inspiration to learn new research strategies and apply social work approaches, values, and methods to technology to reduce bias and harm through community-centered approaches to promote human rights and social justice.

What individuals, organizations, or resources have been instrumental in advancing your career?

I have been very closely working with Prof. Desmond Patton, Director of SAFELab, initially at Columbia University and now at the University of Pennsylvania. Then, having received a Magic Grant from the Brown Institute for Media Innovation, I had the great opportunity to work with Prof. Jeff Hancock, Founding Director of the Stanford Social Media Lab and Prof. Justin Reich, Director of the Teaching Systems Lab at MIT, as well as with the Brownsville Community Justice Center (BCJC), to co-build a simulation learning platform for community-centered interpretation of social media posts by BIPOC youth. The current RSM Assembly Fellowship with Harvard University's Berkman Klein Center for Internet and Society will be further instrumental in expanding my social media research network and collaborating for global impact.

In your opinion, what are the most important issues in Responsible Tech today?

Meaningful participation of historically marginalized communities and young people is limited in tech. Only 9% of STEM workers in the US are Black and only 7% are Latinx. Similarly, across the globe, historically marginalized

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communities' access to STEM work is limited. Equity in tech policy and practice is lacking hugely. It requires a paradigm shift from STEM to STREAM (Science, Technology, Rights & Responsibilities, Ethical Engineering, Arts, and Math) education to make future tech innovations and practice just and responsible.

What is one major change that you would like to see in the next few years?

I would like to see more social workers in the technology space to promote human rights and social justice to make Responsible Tech a reality. Since social workers are regularly in touch with communities and continue to address behavioral challenges and human rights issues through practice-based training, social work skills can be leveraged in inclusive technology development, deployment, and ethical use of data. Social workers can also establish transdisciplinary research and practice for social cohesiveness in emerging technologies.

Looking ahead, what makes you optimistic that we can build a better tech future?

I think the tech space is slowly getting more diverse now in terms of people and discipline. I am very hopeful that meaningful participation from diverse communities at all levels such as education, practice, research, and policy with co-creative design justice principles would pave a path for just tech futures.

Connect with Siva Mathiyazhagan @MDSShiva

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-Siva Mathiyazhagan, Associate Director of SAFELab, University of Pennsylvania

Trisha Prabhu

Anti-Hate Activist, Inventor and Founder & CEO at ReThink



Tell us about your role:

I'm the Founder and CEO of ReThink, a global movement tackling cyberbullying and redefining Internet culture. Our flagship product is the ReThink app, a 4-times patented technology that proactively stops online hate. Working across all apps, ReThink detects offensive content before it's sent and gives users a chance to "ReThink" sending it. Today, in collaboration with partners like the US State Department, the ReThink concept has been introduced to 134 countries. The app is available in 8 .

languages, was named one of Google Play's Most Innovative Apps, and has been featured on stages ranging from ABC's Shark Tank to The White House. As an anti-hate global advocate, I've also delivered 75+ talks in 30 cities - including a TED talk - about the power of ReThinking. In 2022, my debut book, "ReThink the Internet," a by-youth, for-youth "survival guide" to the digital world, was released from Penguin Random House.

How did you pave your career in the Responsibility Tech field?

At 13, I read an article about a girl that had died by suicide after being cyberbullied. I was heartbroken and outraged. Rather than be a bystander, I decided to be an Upstander. Curious to understand why teens were so willing to post offensive messages online, I started to investigate the potential connections between adolescent brain development and cyberbullying. My research revealed an interesting insight: because the brain isn't fully developed until the age of 25, many teens struggle with in-the-moment decision-making (such as: posting an offensive message). That's when I began to wonder: if I gave teens a chance to rethink the decision to post an offensive message, would they still do it? To test my idea, I conducted a scientific study - later acclaimed by Google and MIT - that found that when prompted to rethink, 93% of the time, youth changed their mind. ReThink was born.

Within your area of practice, who still needs to be included in your field?

The anti-cyberbullying space - and the Responsible Tech space more broadly - definitely needs more youth voices. Because so many of the Internet's harms - including cyberbullying - disproportionately affect youth, soliciting their perspectives not just in research, but as part of decision-making and solution creation is key. Indeed, my experience as a digital native has been core to my work with ReThink. For instance, as a young person, I knew that reactive solutions, like encouraging victims to report cyberbullying to an adult, while well-intentioned, rarely worked. It was that understanding that pushed me to find and develop a more proactive solution - ReThink. All that's to say: actively seeking out and including youth voices at the table needs to be a part of our Responsible Tech future.

What does a better tech future look like to you?

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For me, a better tech future looks like an Internet that is driven by kindness, inclusivity, and safety. It looks like a digital world that is designed to empower users to be the best digital citizens they can be. In this future, all youth have access to relevant, relatable digital literacy education that equips them with the skills to responsibly navigate our digital world. And in this future, the folks developing the technologies and platforms we use every day reflect the diversity of their users. I believe we're on the way to that better tech future, and I'm hopeful that together, we can get there.

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-Trisha Prabhu, Anti-Hate Activist, Inventor and Founder & CEO at ReThink

Valerie Gomez

Program Manager at Berkman Klein Center for Internet & Society



Tell us about your role:

I am currently a Program Manager with the Berkman Klein Center for Internet & Society at Harvard University engaged with Educational Initiatives. One of the primary programs I lead the coordination for our research sprints, a program for emerging scholars that explores a topic in technology that impacts society. My role allows for the flexibility to explore research interests and mine includes how educational technology impacts students and educators.

How did you pave your career in the Responsibility Tech field?

By accident! I am a social worker who is also an educator but was curious about how technology was impacting underresourced communities and schools. The more I read and learned about Artificial Intelligence (AI), the more I became equally cautious and optimistic.

I was accepted as a visiting scholar to universities in Bogotá, Colombia where I taught the course, The Human Side of Artificial Intelligence (AI). The curriculum I

created embedded the questions and viewpoints that I wanted to explore about the ethical implications of AI. After my experience, I looked for ways to be in conversation with others about the topic and eventually found my way to the Berkman Klein Center for Internet & Society where I am immersed in the topic regularly.

What advice would you give to college & grad students looking to be involved in the Responsible Tech ecosystem?

(1) Stay curious and know that even if others around you are not asking the same questions, your viewpoint and experience matters!

(2) Examine your university course guide across disciplines and take classes that address Responsible Tech topics. If your program or university does not offer a course like this, explore research centers or organizations that may offer external student program opportunities.

(3) Find relevant newsletters of organizations or individuals on Twitter who are doing the work – let the information come to you! The All Tech is Human Responsible Tech Guide lists universities and institutes, some who have email lists or active social media accounts, and the Berkman Klein Center has a weekly newsletter that you can subscribe to with recent research, resources to read/watch/listen, and applicable events.

What skills have you found most valuable in your current role?

The skill I think that is the most valuable for my current role and has been throughout my career is empathy. If we assume that everyone is trying their best or we try to understand where they are coming from, we may ask a question in a way that challenges someone for good or make a statement that builds connection with someone who may not be like you.

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What advice would you give to others looking to build a similar career?

If your identifiers do not match those in the Responsible Tech field, keep your head up! There may be a gap or you have not found your people yet. If the opportunities do not perfectly align, find adjacent opportunities or create your own!

For example, I was teaching in the School of Social Work, and I was not having regular conversations about Responsible Tech. I applied to present my work at a conference and received a phone call from the selection committee for additional clarification but was still rejected because the topic was not deemed relevant. I did not view it as a “no” but as a “not yet.” After this, I asked to guest lecture in the classes of my colleagues, refined my language, and applied to other interdisciplinary speaking engagements that led me to other opportunities and my current role.

Looking ahead, what makes you optimistic that we can build a better tech future?

As I continue to build my network, I am inspired by college and graduate student’s interest and excitement in responsible and ethical tech. Their enthusiasm counters my skepticism that I feel sometimes. I am awe of colleagues and their innovative research that helps to shape policy. I have the privilege to witness their perseverance when there is inaction from tech and policy leaders, and I can’t help but to feel optimistic as I witness them as disruptors of the space.

If your identifiers do not match those in the Responsible Tech field, keep your head up! There may be a gap or you have not found your people yet. If the opportunities do not perfectly align, find adjacent opportunities or create your own!

-Valerie Gomez, Program Manager at Berkman Klein Center for Internet & Society

Gullnaz Baig

Director of Trust and Safety, Aaqua



Tell us about your role:

It is a huge portfolio that I cover, so I see my primary role as putting together a solid team of resilient and passionate individuals who can together figure out what it means to build a safe, and purposeful space for communities to engage in, and then build that vision. I stumbled into this space and initially approached it with a lot of skepticism. I was not convinced that beyond the public sector, businesses would be invested in being responsible unless it impacted their brand reputation.

My experiences proved me wrong- that there's a lot of resources and effort being invested into this space. Responsible Tech sits at the heart of ensuring an inclusive, just and equitable society- and there's a need for those of us in the social sciences and humanities, from across diverse communities, to advance what is being developed in the right direction and represent society more holistically . I would advise everyone to keep an open mind, be exposed to opportunities and do not preclude your role in building Responsible Tech simply because you could not code if your

life depended on it.

What skills have you found most valuable in your current role?

Strong and sound analytical skills, with an ability to grasp esoteric concepts and consider its application. Good communication and interpersonal skills. Above all, the ability to embrace and make sense of chaos, and being open and agile to the need to evolve.

What advice would you give to others looking to build a similar career as you?

To be honest, I still sometimes wonder how I got into this career pathway. My experience has taught me to keep an open-mind to opportunities, whatever projects you take on do it well and your reputation over time will precede you. For the Responsible Tech space particularly, there are a lot of events, resources and community activities. Leverage those to help you figure out what aspect of this field you're particularly inclined towards and build relevant skills and knowledge to that end.

What individuals, organizations, or resources have been instrumental in advancing your career?

I operate in a select segment of the Responsible Tech space where safety and security issues play a central role. Engaging with community partners, thought leaders, academics in these spaces have allowed me to develop empathy and understanding for these issues, beyond what could ever be studied. I can't say for certain if that has helped advance my career, but that has certainly made me perform my roles well, which I think contributes to my career progression. Otherwise it's a mixture of luck and being open to opportunities to come about.

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Where do you see the future of Responsible Tech headed?

Responsible tech will develop into a more concrete framework that informs more of tech beyond, for example, AI and Ethics or DEI considerations. As the framework matures, it will hopefully drive adoption across various tech development efforts and business models. My lofty hope is that the framework then drives towards tech playing the role of being a social leveler, and help contribute to bringing more access and opportunities to those who hitherto have been on the fringes.

Connect with Gullnaz Baig on [LinkedIn](#)

"Responsible Tech sits at the heart of ensuring an inclusive, just and equitable society- and there's a need for those of us in the social sciences and humanities, from across diverse communities, to advance what is being developed in the right direction and represent society more holistically."

-Gullnaz Baig, Director of Trust and Safety, Aaqua

Alicia Blum-Ross

*Kids and Families Strategy, YouTube**



Tell us about your role:

I work to help children, teens and families more safely connect, create and learn at YouTube and across Google platforms. I recently joined the YouTube product team (having come from Government Affairs and Public Policy) to focus on how our platform can best support younger users, when it comes to safety, opportunities to learn and create, and gaining digital literacy skills that can help them navigate YouTube and other platforms. I work primarily with the teams responsible for YouTube Kids, our

new Supervised Experiences for families on the main YouTube platform, and our child safety teams within Trust and Safety.

How did YOU pave your career in the Responsible Tech field? What advice would you give to college & grad students looking to be involved in the Responsible Tech ecosystem?

I have had a lot of different careers with the same topic area! My whole career has focused on leveraging media and technology to help create more equitable

opportunities for children and teens, especially, to connect with their wider world. I studied Anthropology and Film studies in college and then worked for a small non-profit, Film Aid International, running film-based educational programming in refugee camps in East Africa. I had the opportunity to serve in the Dadaab refugee camps on the Kenya/Somali border to work with refugee youth to create health messaging based on their lived experiences. I later went into academia and finally into tech - so while I've worked in lots of different environments the common thread has been optimism about what young people can accomplish when they are offered safer and more supportive environments online.

What skills have you found most valuable in your current role?

Ethnographic interviewing! It's odd to say since I am not in a research role but I find that my skills as a researcher in focusing on being empathetic, open to new ideas, building relationships and helping understand what people are worried about or hopeful for has helped me navigate the politics of a very large tech company, with many external stakeholders.

What advice would you give to others looking to build a similar career as you?

Find a problem that you think is fascinating and be prepared to look at it from many different angles! While the day-to-day work I do has changed considerably from being an academic researcher/instructor to now working in a product team at YouTube, a lot of the questions and problems remain remarkably consistent.

What individuals, organizations, or resources have been instrumental in advancing your career?

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So many! I had the good fortune of working with a number of excellent mentors throughout my career. In particular I learned so much from working with my former colleague and supervisor Professor Sonia Livingstone at the LSE, a global authority on children's rights on and offline. She and I wrote a book together (Parenting for a Digital Future: How Hopes and Fears About Technology Shape Children's Lives) which was a true collaboration. Since coming to Google I have become more engaged in the international NGO community who work on child safety issues online, and am currently a Board member for the Technology Coalition, which brings industry together to help fight online child sexual abuse and exploitation. Organizations like the Family Online Safety Institute, Common Sense Media, Parent Zone and 5Rights, the Australian eSafety Commissioner and many, many more have long been leaders in this space.

Where do you see the future of Responsible Tech headed?

The Responsible Tech framework has always been a part of tech consciousness, but I think there is much more diversity in terms of the types of professionals who are in tech now than there was several years ago. At Google I work with many colleagues who came from humanities and social science academic departments, who worked for NGOs, who were teachers and who came from government. This makes our conversation much richer when there are many perspectives represented - I can only see this as a hopeful future trend that enriches our understanding of what Responsible Tech means and can be.

Connect with Alicia Blum-Ross @aliciablumross

**Alicia Blum-Ross is now Senior Director, Global Youth Policy at Twitch.*

"Find a problem that you think is fascinating and be prepared to look at it from many different angles! While the day-to-day work I do has changed considerably from being an academic researcher/instructor to now working in a product team at YouTube, a lot of the questions and problems remain remarkably consistent."

-Alicia Blum-Ross, Kids and Families Strategy, YouTube

Ruth Kikin-Gil

Responsible AI strategist, Senior UX Designer at Microsoft



How did YOU pave your career in the Responsible Tech field? What advice would you give to college & grad students looking to be involved in the Responsible Tech ecosystem?

I co-lead the creation and implementation of Responsible AI practices in the Security, Compliance, and Management organization in Microsoft. The understanding of Responsible AI and how to activate it in product teams is dynamic and keeps evolving, and while we take guidance from Microsoft's Office of

responsible AI, the implementation details and considerations depend on context and are open to innovation. To build our RAI strategy we had to build an understanding of our RAI posture and combine that with the org's product development culture. We work on building a consistent and reliable process that is part of the product development cycle of any AI-powered product on the team. We want our team members to understand Microsoft's AI principles, apply the principles to their work, be familiar with available RAI tools and methods,

and collaborate with other disciplines to create human-centric AI products that are useful, usable, desirable, and responsible.

What skills have you found most valuable in your current role?

It all started a few years ago. I was a designer who worked on AI products, and with time I became deeply interested in the intersection of AI, design, and ethics and looked for resources and like-minded designers to share knowledge and learn from. I found myself involved in side projects that explored this intersection, and then in more official projects with Microsoft's AETHER's work group on Human-AI interaction and collaboration - the creation of the Human-AI interaction design guidelines (<https://www.microsoft.com/en-us/research/project/guidelines-for-human-ai-interaction/>).

The more I worked on these side/passion projects and gained expertise, the more I realized that this is what I want to focus on. I wanted to take my skills and my experiences, use them to promote Responsible AI practices, and activate Microsoft's AI principles so they become part of the product development process. Finding a place to do that wasn't easy and included writing my own job description and pitching it to managers in an endless series of conversations until the stars aligned and I found a great and supportive manager that had both the vision and the head count.

What advice would you give to others looking to build a similar career as you?

There is no known path to follow, and no one end goal. Be ready to experiment with your career, understand how you can bring your strengths and current skills to what you want to do. Find like-minded people around you.

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Where do you see the future of Responsible Tech headed?

Responsible tech is challenging and necessary. There is tension between a culture of moving fast and breaking things, and a culture of considering implications and impact before moving forward.

Regulations and governance in different countries will force companies to consider some of the aspects and follow the rules, but the potential of Responsible Tech is bigger than checking boxes to stay compliant with laws. It is and continues to be a source of innovation, of finding ways to create new technologies and introduce products and services that do good rather than harm and are crafted with great attention and with humanity-centric approach.

To accomplish that, we will need people with wide range of skills and knowledge: creating guidelines and policies, inventing best practices that address issues in all aspects of product development process and touching both the technology and the user experience, planning and deploying processes that help product teams go through the right steps to develop products responsibly even if they don't see the big picture, and building a body of knowledge on how to do that efficiently.

Connect with Ruth Kikin-Gil @RuthKikinGil

"Responsible tech is challenging and necessary. There is tension between a culture of moving fast and breaking things, and a culture of considering implications and impact before moving forward."

-Ruth Kikin-Gil, Responsible AI strategist, Senior UX Designer at Microsoft

Rey Allie

*Head of Trust & Safety at IRL**



Tell us about your role :

I am the Head of Trust & Safety at IRL. IRL is the leading group messaging social network that brings people together through groups, events, shared experiences, and interest-based communities. As the recently hired Head of Trust & Safety I will lead the creation of policies, processes, and safety product features to enable a safe experience for users. I will be responsible for working across the company to ensure we build features/products in ethical and responsible ways so that we

contribute positively to our users' lives and be an overall force for good. My role will also involve liaising with external organizations and thought leaders so that we stay on the cutting edge of new safety trends and we are contributing to the broader Responsible Tech innovation movement.

How did YOU pave your career in the Responsible Tech field? What advice would you give to college & grad students looking to be involved in the Responsible Tech ecosystem?

My career has been a winding path: I began in HR at Google, and eventually pivoted into Intelligence/Threat Analysis (at Google, Uber and Twitter), where I focused on analyzing the impacts of geopolitical conflicts and world events on a company's ability to operate in or enter markets. Eventually (at Twitter, TikTok, Picsart and now IRL) I became more focused on how companies protect their users and how they can build experiences and features to both safeguard users and the integrity of their platform. My advice to college/grad students is to truly understand the business model and product of the company you work for. This allows you to build trust across the organization, and be seen as someone who's work advances the company as a whole. Also being well read on the tech industry, government regulations, and the general business environment goes a long way.

What skills have you found most valuable in your current role?

My ability to connect the dots and proactively assess the potential risks of a situation have been vital throughout my career. It is important to be able to understand how one part of the product works with another, and how one policy decision might impact future decisions. Connecting dots between decisions, features, teams, or data points is integral to ensuring you can proactively spot issues and opportunities. Additionally, being able to assess potential risks of new features and anticipate user feedback on them (all in a non-alarmist fashion) is incredibly important and has helped me build credibility throughout my career.

What advice would you give to others looking to build a similar career as you?

I have always been a proponent of taking principled risks in your career -- ex: put your hand up for a project you are

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interested in but might not have all of the necessary skills for, or transfer to a new role or join a new company if it offers you an expanded or more challenging opportunity. But as you take on more and/or pivot into new roles, always re-evaluate and re-align your knowledge sources and network so that you have the right tools and people to learn from and rely on. The Trust & Safety and Responsible Innovation spaces are newer and constantly evolving so staying educated of new trends, issues, concepts is crucial.

What individuals, organizations, or resources have been instrumental in advancing your career?

My previous bosses have become incredible mentors to me -- being available to bounce ideas off of or discuss if a new career opportunity is right for me. Additionally, Twitter (the app/product) has been instrumental in helping me broaden my knowledge base, staying up-to-date on regulatory or industry happenings, building my network by connecting with people who have similar interests or come from diverse backgrounds, and also to spot new emerging trends in the abuse/safety space.

Where do you see the future of Responsible Tech headed?

I believe, now more than ever, that Responsible Tech is actually possible. Companies are actively thinking about their impact on both users' wellbeing/mental health as well as their overall impact on society. Additionally, with increased focus on diversity in hiring and inclusion in the workplace, more voices are being heard and considered during the product development lifecycle and other corporate decisions that impact the userbase. I also believe that users will continue to demand more of companies, speak out against those that don't value trust, safety, privacy, diversity, etc. This will likely push companies to consider how their product, features, marketing, principles, behaviors, etc. impact users, society, and the world. Lastly companies will have to navigate the tradeoff between (1) making decisions (or having AI make decisions) for users and (2) giving users more control and choice over their experience/feed/settings.

Connect with Rey Allie @techgeekrey

**Rey Allie is now Head of Strategy - Trust & Safety at Amazon Web Services (AWS).*

"Connecting dots between decisions, features, teams, or data points is integral to ensuring you can proactively spot issues and opportunities."

-Rey Allie, Head of Trust & Safety at IRL (formerly)

Kathy Baxter

Architect, Ethical AI Practice at Salesforce



Tell us about your role:

As an Architect of Ethical AI Practice at Salesforce, I work with teams and roles across the company including research scientists, product management, engineering, UX, legal, and government affairs. I work with our research scientists to examine ethical considerations in their AI research to ensure it is safe. I collaborate with product teams to identify features that empower our customers to use our AI platform (Einstein) responsibly and to build those features with ethics in mind.

A chunk of my time is also focused on developing processes that bake ethical considerations into our development cycle. And finally, I engage with customers, policy makers, civil society groups, peers at other tech companies, and consumers broadly to share what we've learned and to learn from them so we can create a more fair and just world together.

How did you pave your career in the Responsible Tech field? What advice would you give to college & grad students looking to be involved in the Responsible Tech

ecosystem?

I have a BS in Applied Psychology and MS in Engineering Psychology/Human Factors Engineering. It is a technical degree situated in humanities with an emphasis on research ethics -- ensuring what we are doing provides benefit and avoids harm. I began my career in user experience research, examining people's needs, context of use, and values. In 2016 I transitioned to research in AI and focused on the ethical risks AI can present. In 2018 I pitched and created a role to focus on ethics in AI full time.

My advice: There are loads of existing resources and research in this area. Block off at least two hours per week, every single week, to stay up-to-date on the latest research and resources. Follow experts on social media, attend conferences and meetups, and build your network. This area is rapidly developing & if you don't invest in keeping up, you'll be left behind. There is no shortcut, summary course, or CliffsNotes to learning about the vast world of ethics in technology as a foundation and ethics in AI specifically.

What skills have you found most valuable in your current role?

* PERSEVERANCE: I've never encountered anyone that has said, "Who cares about ethics? We're here to make money!" I'm sure those people exist but for the most part everyone wants to do the right thing. The challenge is that they have a lot of competing demands so it can take perseverance to understand those demands and help decision makers prioritize ethics. And you have to be able to do it in a way that the other person feels supported, not judged or harassed. If people dread opening your emails or meeting with you, you will never make an impact.

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* **PASSION:** Reading day-in-day-out about harmful applications of AI can feel like waking up and taking the red pill every morning. Sometimes I'm so exhausted, I just want to take the blue pill and forget it all! But it is my passion to use AI to help make the world a more fair and just place than it is today. I truly believe I can make a difference and that passion keeps me going.

* **TIME MANAGEMENT:** Most projects either fall into the "Urgent -- a solution needs to be found NOW" or "Strategic -- work towards a significantly better solution than we have today" bucket. Juggling multiple projects, especially when a single urgent email or IM can take over your entire day (or three!) requires serious time management skills so that strategic projects don't end up getting ignored or you find yourself in permanent reactionary mode.

* **COMMUNICATION:** Good communication skills are part of all of the above. Conversations about ethical issues can touch on people's value systems & if they feel their values are being questioned or threatened, people can respond viscerally. You need to be able to deescalate conversations and keep the discussion respectful even when you may feel extremely passionate or like your values are being threatened. It's also a challenge when in the middle of dealing with an urgent issue to remain calm and focus on solving the problem at hand. Clear, concise, and respectful communication skills are key to success in this role.

Where do you see the future of Responsible Tech headed?

I'm encouraged by the increased public focus on issues of racial injustice in technology in the wake of the BLM movement and COVID. There have been more discussions about how much surveillance we are comfortable with, whether it is for health or security purposes. Big tech companies are reconsidering who they sell facial recognition to and for what purposes. There are questions about the harms vs. anticipated benefits of predictive policing and if it can ever be applied fairly. There is greater awareness of the risks of deepfakes and disinformation to our democracy and who is responsible for keeping it in check.

The push for AI regulation by a concerned and angry society will only increase. AI regulation is already being implemented in California, Illinois and Massachusetts, with more US states will follow. Just as the EU's GDPR changed the way US-based companies handled the data and privacy of customers in the EU, we will see significant changes in how EU and US-based companies work following AI regulations in the EU. This is a good thing. Despite fears that regulation will harm innovation, I believe it will elevate the ethical playing field and stop the race to the bottom for profits by any means necessary.

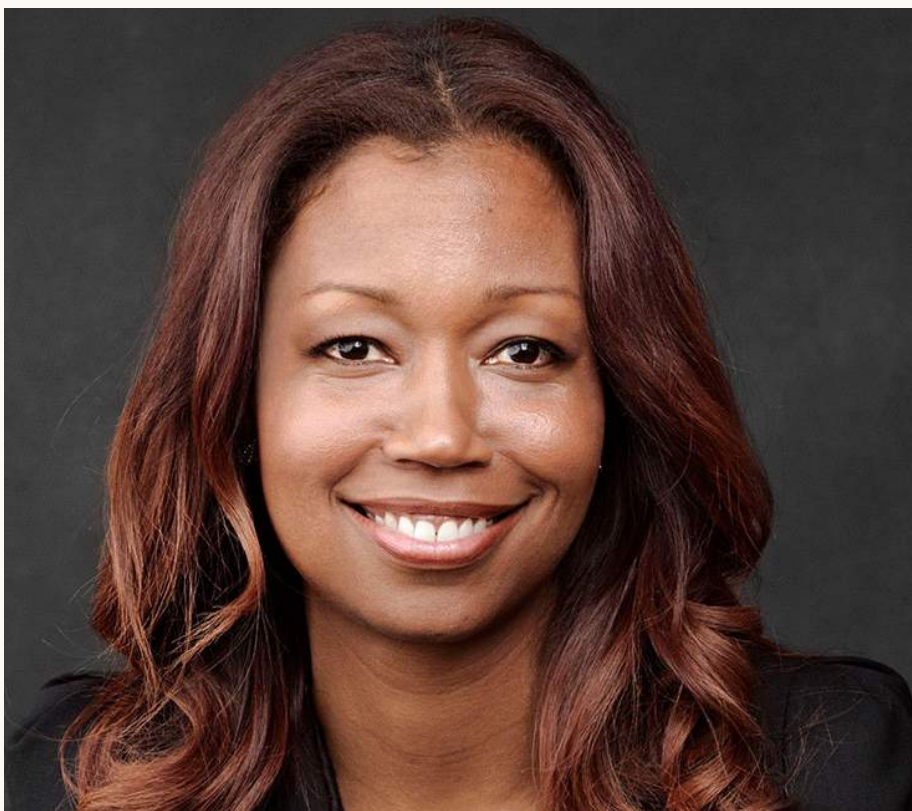
Connect with Kathy at [@baxterkb](#)

"Block off at least two hours per week, every single week, to stay up-to-date on the latest research and resources. Follow experts on social media, attend conferences and meetups, and build your network."

-Kathy Baxter, Architect of Ethical AI Practice at Salesforce

Lisa Lewin

CEO of General Assembly



Tell us about your role:

I am the newly appointed Chief Executive Officer of General Assembly, a global education company with a vision to be a seamless talent ecosystem for everyone, everywhere. And we do that a number of different ways. We provide education and training to adults who are looking to gain a new skill or change their careers, through a range of programming in tech- and tech-enabled fields like data analytics, data science, digital marketing, product management, and software engineering. We also work with Fortune 500 companies

looking to upskill existing talent or find new sources of talent, and sometimes even reskilling existing employees for new roles. As the CEO, I'm responsible for setting the vision and strategy and steering our global team to execute against that vision and strategy.

How did you pave your career in the Responsible Tech field?

Through every step in my career, there have been a few guiding principles about the role that business should play in creating a more just, equitable, and sustainable future that I would urge

anyone starting their career in Responsible Tech - or any field, really - to consider. I believe that business leaders have a choice in a world on fire - we can be arsonists, bystanders, or firefighters, and only one of those is the right choice. That's not to say we take a business and try to solve all the universe's problems, but that we acknowledge that business has a role to play in addressing many of the injustices and inequities that exist in our world.

What skills have you found most valuable in your current role?

I'm still very much defining my role at GA, so I'll say a little bit about what I've found valuable in the past and how that's guiding me. In my own experience in education and technology over the past two decades, my starting point - whether as an executive or as a consultant - is always to listen, to ask why, and to ask why again and again. That process of inquiry allows me to really understand what brought this organization to this moment, where there are areas to improve and change, and where we want to refocus our efforts or perhaps seek out new opportunities. And I think that curiosity, that willingness to listen, to ask questions, to look at the data, to check assumptions, is critical for anyone to be successful, no matter where you work or what you do.

What impact is your company having on the Responsible Tech ecosystem? How is your company helping to build a better tech future?

Responsible tech will become an integral part of how every business operates. In this current moment of crisis, more companies, no matter their industry, are leveraging business principles around Responsible Tech to help solve the world's most complex problems. As emerging or established business leaders, it's on us to envision and contribute towards building a tech ecosystem that is more just, equitable and accessible than the one we found.

Laura Norén

*The VP of Privacy & Trust at Obsidian**



Tell us about your role:

As the VP of Privacy and Trust it is my job to formulate the privacy principles, practices, and processes that we follow at Obsidian. I spend equal parts of my time understanding how new data privacy regulations impact Obsidian and working with our engineering and data science teams to technically implement our privacy by design processes.

Another one of my roles is to propagate privacy culture throughout our organization.

Obsidian employees are recognized and rewarded for spotting potential privacy problems, raising questions about their own privacy practices, and for suggesting improvements to our privacy by design processes. I find this aspect of the job to be the most rewarding and the most critical to our success. Even at a relatively small start-up, privacy is not *my* job, it's a team sport.

We use the title "Privacy and Trust" to describe my role because we realize that a lack of transparency, a failure to be thorough and mind the details, or a departure from the

utmost respect for individuals' privacy will result in a loss of trust.

How did you pave your career in the Responsible Tech field?

Just about any career path for someone who has ended up in a new field is a 'follow your intellect' scenario. I have always been curious about how it is that groups of people come to make the scientific and engineering breakthroughs they make, when they make them, and with the specific feature sets they include.

In other words, I have always been fascinated by the way the physical world reflects the inclinations of small groups of people. I've spent as much time as I could around people building and designing things - apps, electric cars, logos - and dedicated my bookish ways to social scientists.

Understanding people and how they work will never be a bad idea. My only regret is that I haven't spent as much time learning to code as I would like. Yet. :)

What skills have you found most valuable in your current role?

Keen listening skills and observational capacity. Being aware of how power flows in groups of people. Reading comprehension is critical. Writing and speaking clearly. Data Visualization.

What do you see the future of Responsible Tech headed?

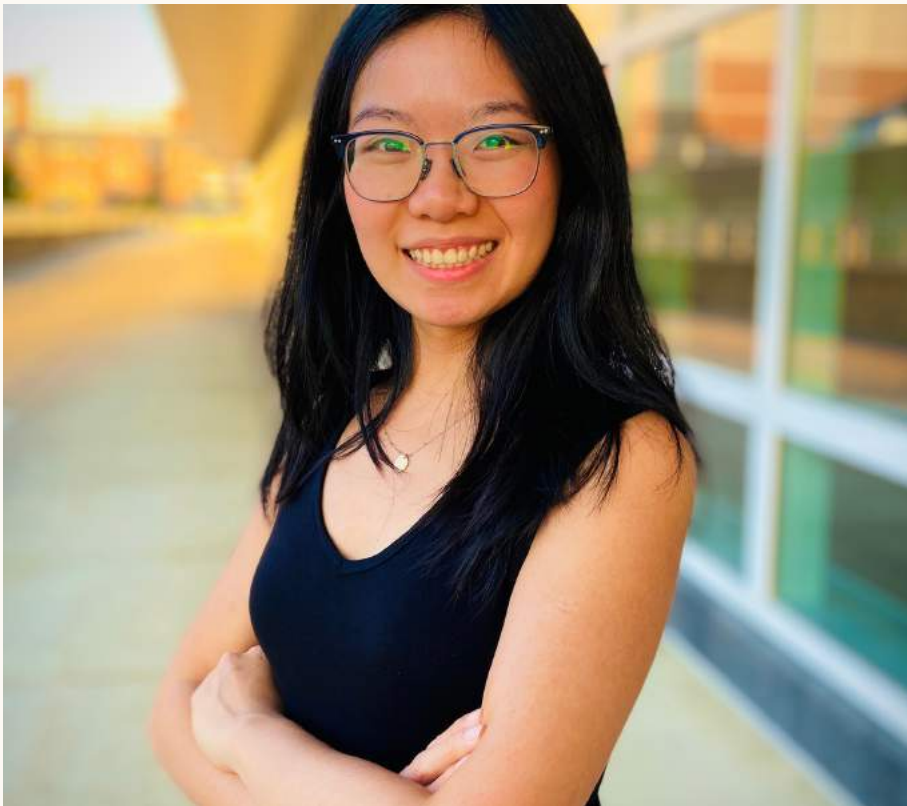
I'm too smart to try to predict the future on a public forum during a pandemic, a time of great social unrest, and what may turn out to be an impending economic collapse.

Connect with Laura Norén at [@digitalFlaneuse](https://twitter.com/digitalFlaneuse)

**Now a Privacy Engineer at Google*

Alice Fung

Senior Data Governance Analyst at The New York Times



Tell us about your role:

As a Senior Data Governance Analyst at The New York Times, I analyze and create standards to improve the company's data usage in ethical, strategic, and efficient ways. Because my team is always looking for ways to use data privacy regulation as an opportunity to develop new tools that help us be more trustworthy custodians of our readers' data, I act as a liaison between the data governance team, the legal department, engineers, and subject matter experts. Engineers help us understand what

is technically feasible to build. Legal counsel ensures that the implementation is compliant with regulations. I compile and translate this information in both directions to help drive projects toward completion.

Additionally, because the concepts of data governance and ethics can be confusing, a large part of my role entails helping my peers understand these ideas so that they can use data responsibly.

There is never a dull day at my job.

How did you pave your career in the Responsible Tech field? What advice would you give to college & grad students looking to be involved in the Responsible Tech ecosystem?

Willingness to learn has opened many doors for me. I recommend applying to as many positions that spark even a slight interest in you as you can. Every entry level job will have its appeal and downsides, but just remember that there is so much to explore in every field. Do not shy away from opportunities that seem challenging because they will teach you the most.

What skills have you found most valuable in your current role?

Stay curious. The ability to communicate clearly and having a positive attitude can go a long way.

Where do you see the future of Responsible Tech headed?

As artificial intelligence and machine learning grow, there is also demand for guidelines on how to govern them.

Separately, with an increase in data literacy among consumers, I hope more companies will put privacy before profit, or even better: find ways to align privacy and profit.

Connect with Alice at [@aliceafung](#)

Chris McClean

Global Lead, Digital Ethics at Avanade



Tell us about your role:

As global lead for digital ethics at Avanade, I am responsible for strengthening the company's digital ethics fluency throughout a global base of nearly 40,000 employees. I am also responsible for advising Avanade clients on their own digital ethics journey, whether designing, developing, implementing, and operating technologies more ethically or establishing digital ethics capabilities for themselves.

How did YOU pave your career in the Responsible Tech field? What

advice would you give to college & grad students looking to be involved in the Responsible Tech ecosystem?

I started off in marketing, working almost entirely with information security startups at a small agency, then in-house. I then moved into market research and advisory as an analyst at Forrester, where I gravitated toward compliance and risk management, then corporate values and ethics, which I found endlessly interesting and major gaps for most companies. Along the way, I earned a Masters in Business

Ethics, then ultimately came on board with Avanade to solidify and build on the company's existing Digital Ethics efforts and capabilities.

My advice for students who want to get into this space is to constantly look for ways to incorporate Responsible Tech ideas into what you do. Whether it's your next research project, an internship where you're building technology, or during the interview process for your next job; make ethics and responsibility part of the conversation. As you find specific areas that interest you – whether explainable AI, digital accessibility, privacy, or any of the vast other relevant domains – read as much as you can and connect with people who are doing that work to find out the best ways to get involved. Even if you aren't able to be in a Responsible Tech role 100% right away, you can still play an important part in helping people in other disciplines think more about these issues.

What skills have you found most valuable in your current role?

- Being able to understand technology's role in the context of business and human interactions (context is everything).
- Employing empathy to understand why people might (or might not) be motivated to consider ethics in their everyday work.

- Communicating very complicated topics with precision and clarity.

What do you see the future of Responsible Tech headed?

I expect that we'll see an evolution similar to that of information security and privacy over the past two decades. Both of those disciplines had been historically been relegated to small technical teams with little authority or visibility in the corporate environment, and both were coaxed out of the

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shadows after a series of large breaches, massive fines, and heavy regulations. Now, they're board-level issues in nearly all regions and industries, and they have become expected responsibilities for employees in most corporate functions.

I'm hopeful that Responsible Tech will travel this path faster than security and privacy, because we see incoming professionals showing a greater level of interest in corporate values and non-financial performance. I'm also hopeful that people will see that while security and privacy breaches can be terrible, the repercussions from a breach of digital ethics could be much worse.

Connect with Chris on [LinkedIn](#)

"My advice for students who want to get into this space is to constantly look for ways to incorporate Responsible Tech ideas into what you do. Whether it's your next research project, an internship where you're building technology, or during the interview process for your next job; make ethics and responsibility part of the conversation."

-Chris McClean, Global Lead, Digital Ethics at Avanade

B Cavello

*Program Lead, Partnership on AI**



Tell us about your role:

I am a research program lead at the Partnership on AI which means that I facilitate multistakeholder research with Partners and contributors to develop recommendations for responsible AI. My work involves collaborating with many people from different backgrounds and disciplines and working to synthesize information to make meaningful and actionable recommendations on how to reduce harm and maximize goodness from AI. Sometimes this means wearing a design research

hat and thinking about stakeholders and processes. Sometimes this means acting as a project manager balancing timelines and budgets. Other times, I act as a facilitator and communicator, hosting conversations or helping amplify the learnings that came of them. My favorite part of my work is that whatever I'm doing, I'm constantly learning!

How did you pave your career in the Responsible Tech field? What advice would you give to college & grad students looking to be

involved in the Responsible Tech ecosystem?

Responsible tech has many facets and there is not only room for but a need for a diversity of perspectives and skills in this space. Some people enter the field through deep study. Others come by way of industry experience.

My own journey took an unconventional form. Something I've been learning to appreciate about myself that I am a generalist and a synthesizer. One of my strengths is that I can connect many disparate learnings to build a richer model.

My career has taken me through a variety of jobs including founding an arts and education nonprofit, working as a change management facilitator with a global business consulting group, leading product development and community management at a record-breaking Kickstarted card game startup, and facilitating strategic conversations and educating global business and government leaders in Big Tech. It's been a journey! Through it all, I owe so much gratitude to my friends and people who advocated for and coached me along the way.

If I could offer one piece of advice to others who, like me, may be more generalist in their approach, I would say: make your interests known.

Something that's been incredibly valuable to me is that people think of me when they're asked who knows about or is passionate about something. So many of the opportunities that have come my way are thanks to this. Whether through speaking with people or writing blog posts or committing code or making videos or whatever: make your interests known!

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What skills have you found most valuable in your current role?

Doing the sort of work that I do requires a strong degree of versatility and collaboration. Multistakeholder work can involve a lot of context switching, and working on a small team can dial that up by requiring a person to play many different roles within a single day (or even a single moment)! Sometimes I need to have a circus ringleader's dynamism to command the attention of a workshop. Sometimes I need to quietly take notes in the background. Sometimes I am analyzing data or reading research papers, and other time I'm designing interactive interfaces.

Being able to move quickly between different roles and responsibilities and adapting to the needs of a given moment also helps me to be a better member of the team. I find energy and strength in collaboration and supporting my colleagues in their goals. (This is something that people in marginalized groups should be careful of, however, to avoid setting a new baseline for expectations for doing other people's work for them.) Being versatile and cultivating a broad range of skills allows me to bring more to the table and unblock work that gets held up for lack of a specific skill like building a webpage or creating a promotional image. I may not often be the world's leading expert in doing these things, but I can help unblock my colleagues and help get our team back on track.

Where do you see the future of Responsible Tech headed?

I'm wary of predicting the future, so I will share a hope or a vision of what Responsible Tech could be instead. Already, Responsible Tech takes many forms, from social good applications to addressing harmful algorithmic biases to considerations of what types of "disruption" we really want to see.

The space is large, and yet it still suffers from an air of "otherness." There's tech and then there's Responsible Tech. Responsible tech is often seen as orthogonal or sometimes even contrary to tech business. (Sometimes this is even true!) But so long as Responsible Tech is viewed as a niche rather than a core ethos, our impact will be limited. In order to realize the promise of Responsible Tech, I believe we need to recognize the realities of tech practitioners and more intentionally design interventions with those realities in mind. This is pragmatic, perhaps to a fault, but I truly believe that Responsible Tech has to be a shared responsibility of the many stakeholders involved in tech invention, development, and deployment. To do this, we must understand deeply the incentives and goals of these players and address them more directly.

I'm fundamentally optimistic about people and our ability to realize this vision of tech responsibility, but it requires real focus and potentially moving the conversation beyond spaces where Responsible Tech is a shared value into those where it may be seen as an obstacle, a threat, or not even thought of at all. I know we can do this!

Connect with B at [@b_cavello](#)

**B Cavello is now Director of Emerging Technologies at Aspen Institute*

"In order to realize the promise of Responsible Tech, I believe we need to recognize the realities of tech practitioners and more intentionally design interventions with those realities in mind."

-B Cavello, Program Lead, Partnership on AI (formerly)

Bogdana Rakova

*Responsible AI Data Scientist, Accenture**



Tell us about your role:

I am part of a team called Responsible AI at Accenture, where we're working across a variety of industries to help organizations better align the AI systems they use or create with their vision of what Responsible AI means to them. In my role, I need to always be up to date with the theoretical methodologies used in the development of AI systems that are used today as well as the cutting edge of AI research such as the work in the space of fairness, accountability and transparency of

machine learning. However, my technical lens is never sufficient. I need to constantly rely on my social science, science and technology studies, and organizational studies skills to better frame, communicate, and ultimately put in place guardrails for the potential (un)intended practical impacts of AI models. These guardrails usually involve both technical as well as non-technical components which are grounded in multi-stakeholder processes and impact assessments

How did you pave your career in the Responsible Tech field? What

advice would you give to college & grad students looking to be involved in the Responsible Tech ecosystem?

A decade ago, I started out as a software engineer who was working on machine learning modeling as well as creating the interface through which people would interact with a prediction model. I was fascinated by how much power that interface holds and wanted to go beyond the technical aspects of solving software development scale and optimization problems. In 2012 I was a co-founder of a startup which aimed to predict and prevent failures in the production lines of manufacturing facilities in Food Production, Printing and Packaging, and other industries. I was on the ground, talking to employees in small and medium-sized manufacturing companies about the challenges they faced in their existing processes and asking them a lot of questions about their perception of the technology our company was developing.

I learned a lot about the real world challenges people had to face with the introduction of automation and the intricate social and political relationships that were disrupted by an AI system that was reducing a complex sociotechnical problem into a time-series analysis math equation. Later on, after moving away from startups and working as a machine learning research engineer in a hardware company, I was better equipped to shift my career towards that same intersection of technical and social aspects of AI-based systems. Before fully immersing myself in the Responsible AI space, I was a student (2012) and later a Networks & Computing Systems teaching fellow at Singularity University (2014) where I learned to see and recognize the potential for technology to bring about exponential positive impacts. I was also involved in the Assembly: Ethics and Governance of AI program in 2018, a collaboration between the Berkman Klein Center for Internet and

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Society at Harvard Law School and the MIT Media Lab.

What skills have you found most valuable in your current role?

The most important skills to me have always been related to being able to systems thinking, collaboration, asking challenging questions, demanding diversity and inclusion in every context you find yourself in, constantly learning and nourishing your curiosity about the lived experiences of those who might intentionally or unintentionally be impacted by your work in the world.

Where do you see the future of Responsible Tech headed?

I've had a deep interest in the intersection of AI and community well-being. I think that the future of Responsible Tech would involve data and AI governance frameworks, AI impact assessments, and multi-stakeholder collaboration frameworks. This would ultimately enable social change through AI-driven systems that empower everyone to participate.

As a lead guest editor at the Springer Intersections of AI and Community Well-Being Special Issue of the International Journal of Community Well-Being, I have immersed myself in helping community organizers, academics, researchers, instructors, policy makers, business people, administrators, governmental and nongovernmental staff, understand the implications of AI for community well-being. I imagine a future where AI contributes to community well-being, the good of humans, and the planet through community-based platforms and Responsible Tech frameworks such as standards and tools that make it easier for people and organizations to practically operationalize Responsible Tech.

Connect with Bogdana at @bobirakova

**Bogdana Rakova is now a Senior Trustworthy AI Fellow at Mozilla*

"I think that the future of Responsible Tech would involve data and AI governance frameworks, AI impact assessments, and multi-stakeholder collaboration frameworks. This would ultimately enable social change through AI-driven systems that empower everyone to participate."

-Bogdana Rakova, Responsible AI Data Scientist at Accenture (formerly)

Lisa Schonstein

Data Privacy and Ethics Lead/Aviation Industry



Tell us about your role:

As Data Privacy and Ethics Lead, I am responsible for implementing a framework for, and awareness of, good data practice with respect to privacy and ethics.

How did you pave your career in the Responsible Tech field?

I started my career in the Health Industry on the back of academic qualifications in Science, Bioethics and Law. After working on novel policy development for the ethical issues pertaining to Biobanking and

Genomics as well as part time academic work, I moved onto Mental Health to navigate policy, legal and ethical issues for Forensic Patients. Feeling a need to move back to the ethics and data space, I sought a role governing a health database for researchers, government and private use for research and policy development. It became clear to me that data ethics and privacy was an ever expanding and exciting space to be working in which led me to my current role.

Throughout my career I actively sought out other opportunities

(often volunteer based) that would enable me to grow and expand my knowledge base around ethics. These include Advisory Roles for Tech Start Ups, being an Ethics Member for a Human Research Ethics Committee and casual Lecturing in Data Ethics and Security.

If you can take a course, a subject or go to an after-class lecture on data ethics, Responsible Tech etc. then my advice is do it. Take the time to expand your knowledge and to network and meet likeminded people. LinkedIn is a great tool to connect with people. Don't be afraid to ask to just have a chat. Find a mentor – someone who's career and views resonate with you and engage meaningfully with them. Finally, when it comes to job opportunities, look for the ones that encapsulate what interests you. If Responsible Tech or data ethics are of interest to you – seek these roles out and don't be afraid to apply and express your interest in a cover letter.

What skills have you found most valuable in your current role?

Ethical Reasoning – the ability to put forward a position based on a logical and substantiated premise
 Open Mindedness – the ability to challenge and equally be challenged and remain open to other perspectives
 Moral imagination – the ability to place yourself in the shoes of others and assess potential impacts.

Where do you see the future of Responsible Tech headed?

Data Ethics and Responsible Tech is, in my view, an enabler. It allows us to future proof investments in data and build trust. Although ethics does not have a “price tag”, the impact of questionable ethics is substantial. The future of Responsible Tech is about embedding responsible innovation and ethics at every stage of development.

Education for Responsible Tech

What is the path into Responsible Tech? Read about the journeys from those new to the field, and where they believe the movement is headed.

Chizobam Nwagwu

*Coding it forward Civic Digital Fellow**



Tell us about your current involvement in the Responsible Tech space:

Currently, I'm a Coding it forward Civic Digital Fellow working with the Office of the Chief Data Officer at the Department of Health and Human Services. I'm working on redesigning Healthdata.gov to cater to user needs.

What has been your educational journey so far?

I recently graduated with my Masters in Public Policy and

Management from Heinz College at Carnegie Mellon University. While there, I was a Policy Innovation Lab Fellow, a fellowship funded by the New Venture Fund, where I worked on interdisciplinary teams to work on public interest tech projects.

What inspired you to get involved in the space?

I always wanted a career where I could make a positive impact on others' lives. I thought it was interesting to see how technology could also be an additional powerful vessel for positive systemic change.

At the same time, I am definitely aware of how technology can also be a vessel for causing harm. I always saw myself as an interdisciplinary individual and I loved how this space allowed me to bring in my understanding of public policy and work collaboratively with technologists and designers on real policy problems.

How would you like to see higher education evolve to better prepare Responsible Tech leaders?

I really appreciated that my graduate program provided me with several opportunities to engage in topics that are related to Responsible Tech: design thinking, economics, statistics, program evaluation, and so much more. I came out with a solid foundation for approaching problems in a variety of contexts. Now coming out of higher education, it would be great to see more concrete methods for dealing with ethical dilemmas, especially when thinking about the potential harms that tech can exacerbate.

What do you see the future of Responsible Tech headed?

I see a Responsible Tech future that is multidisciplinary and fully embraces equity and sees tech as an avenue to expand/guarantee freedoms to all people. We've seen in the pandemic that access to technology, regardless of the purpose, is clearly distributed inequitably and that divide creates real impacts on real people's livelihoods. We also have seen how important that technology does not operate in silos, but is so extremely important to every individual's understanding of democracy. I hope that I can contribute to that reimagined, ethical and equity-driven future.

**Chizobam Nwagwu is now a Product Manager with Digital Services at Centers for Medicare & Medicare Services (CMS)*

Pranav Senthilvel

Student, Yale University



What inspired you to get involved in the space?

I first became interested in the Responsible Tech space during high school. I had worked on some basic machine learning research and I quickly learned just how much power the user had in manipulating outcomes of such technology. All it takes is one person to misuse open source innovations like AI for it to shift from a tool for creation into a weapon of destruction. That fine line, one predicated on the benevolence of creators, made me wonder how much was really being

done to regulate technology effectively.

This led me down the rabbit-hole of research about the ethics of technology. After exploring the field and understanding just how much needed to be done, I decided to write a summer column at my college's undergraduate political journal about the intersections of data, AI, and policy. This fully introduced me to All Tech is Human and the greater space of Responsible Tech.

What do you see the future of

Responsible Tech headed?

What have been the hurdles you faced when aiming to build your career in Responsible Tech?

One of the main issues with exploring Responsible Tech is that the tech itself is just so new. As the tech industry continues to develop new technology, it is our responsibility to keep up with those developments in this field as well.

As such, there is not as much infrastructure, especially in education, to build a foundation for those who would like to explore this space. Now, this is continuing to improve in Academia as we speak. More courses are being offered at institutions about the intersections of technology and the law. More research is being done on the privacy implication of new methods of data collection. But there is still quite a ways to go until there is a solid, foundational education system for Responsible Tech.

As organizations are doing now, including All Tech is Human, the best way to eliminate this hurdle is to develop an effective curriculum that can teach students how to comprehend the Responsible Tech space and understand its importance in context of the larger technology interface.

Connect with Pranav Senthilvel
@pranavs2128

Tiffany Jiang

Product Designer at Hulu, Co-creator of Ethics Models*



Tell us about your current involvement in the Responsible Tech space:

Since my role at Hulu isn't explicitly tied to Responsible Tech, I've had to seek out opportunities to get involved on my own. After moving to Seattle, I noticed that many new grads, like myself, desired an outlet to openly discuss the ethical dilemmas facing the industry. My friend, Rishabh Aggarwal, and I decided to co-host a tech ethics meet-up out of my apartment. Each month, we emailed readings and questions around a particular

theme (ex: Ethics of Data Tracking, Privacy and Surveillance) to invitees. We structured the meet-ups to begin with hands-on activities before breaking into group discussions.

At work, I had the opportunity to join the Ethics Team, a grassroots effort started by members of Hulu's Design department. We met regularly to brainstorm how ethical frameworks and evaluation methods could be embedded into our product lifecycle. While we shared our thinking and concepts with leadership, the team

eventually disbanded for various reasons. Coincidentally, I chose to pause the meet-ups to reevaluate how the conversations could reach wider audiences than just those in attendance. At the start of this year, Shelly Bensal and I decided to launch an interview series titled, "Ethics Models", where we talk to ethicists working within tech to learn about their roles, contributions, challenges, inspirations and advice for anyone wanting to break into this space. We hope the series serves as a helpful guide, especially to students and new grads who have similarly wondered: Are there really ethicists working in tech?

What has been your educational journey so far?

Starting in elementary school, I attended summer programs, like iD Tech Camp, that allowed me to explore my interests across art and technology. I signed up for a handful of different courses from Web Design and 3D Character Modeling to Graphic Design and Intro to Java Programming. Having access to these courses early on gave me the confidence I needed to further pursue an education and career in tech. I was one of the few women who elected to take AP Computer Science the first year it was offered at my high school. On weekends, I spent time outdoors with my camera and inside experimenting with Photoshop. I loved photography so much that I almost majored in it until I learned about the applications of human-centered design.

At Carnegie Mellon, I pursued a dual major in Communication Design and Human-Computer Interaction. I enjoyed studying in such an interdisciplinary environment where I took classes relating to Philosophy, Design, Computer Science, Drama, Robotics and more. The School of Design offers a non-traditional curriculum that stresses the need to think through the generational impacts and unintended consequences of the

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artifacts we release into society. While the HCI program prepared me with the technical skills needed to land an industry job, the Design program taught me the frameworks needed to intervene within complex systems, forecast unforeseen harms, and facilitate community-based design. My education has shaped me into a socially conscious designer who advocates for “people over profit” and is critical of the tech industry.

How would you like to see higher education evolve to better prepare Responsible Tech leaders?

When it comes to educating the students who will make up the future workforce of our industry, ethics needs to be a central focus of the curriculum. Ethics cannot be an optional seminar. Ethics cannot be “extra credit reading”. Ethics cannot be brought up last minute.

Just as students learn the basic tools and software needed to do their jobs well from the very first day—whether it be in the field of engineering, design or something related—they also need to learn how to identify the consequences and harms of their creations. It’s critical that they fully grasp the meaning of the quote: “With great power comes great responsibility.” I would like to see more educators, notably those teaching at bootcamps and accelerated training programs, integrate ethical frameworks and critical theory into their syllabi.

I hope we hear less of this phrase in the future: “I’m just a _____. Why should I care?”

Where do you see the future of Responsible Tech headed?

1) Interweaving a broader range of disciplines into the product development life cycle so that the standard team composition includes individuals beyond engineering, design and product management. We should be finding ways to loop in ethicists, social scientists, researchers, policy makers, anthropologists, lawyers, and others into our day to day conversations.

2) Making community-based design a standard practice. We need to stop thinking of ourselves as experts and our ideas as solutions. We are not the individuals we are designing for and it’s harmful to simply say, “Let’s put ourselves in their shoes for a moment.” We need to collaborate directly with individuals and communities to hear their needs first-hand, not sit behind a computer and talk amongst ourselves.

Connect with Tiffany at [@tiffanyxjiang](#)

**Tiffany Jiang is now a Senior Designer at Vimeo*

"When it comes to educating the students who will make up the future workforce of our industry, ethics needs to be a central focus of the curriculum. Ethics cannot be an optional seminar. Ethics cannot be “extra credit reading”. Ethics cannot be brought up last minute."

-Tiffany Jiang, Co-creator of Ethics Models

Antara Vats

Executive Lead - Strategy & Partnerships, AI Policy Exchange



Tell us about your current involvement in the Responsible Tech space:

I lead and manage strategy & partnerships at AI Policy Exchange, an international cooperative association of individuals and institutions working at the intersection of AI and public policy. My role typically involves identifying collaborators and opportunities for AI Policy Exchange to facilitate its mission of creating an AI-literate society and generating cross-cultural, interdisciplinary research on the

most pressing challenges confronting AI governance.

I have also been developing policy responses to address the issue of technology-facilitated abuse and violence against women and children, as a part-time consultant with Delhi-based tech policy think tanks.

What has been your educational journey so far?

I completed my undergraduate degree in Social Sciences and Humanities, whereafter I went on

to pursue a Master's in Public Policy. My undergraduate training in Psychology, Sociology, and Political Science lent me the foundational lens to decipher the complex trade-offs that typically need to be balanced in public policy decisions.

In my Master's thesis, I brought together my interests in sociology and technology to recommend the digitalization of land records to tackle the social and economic marginalization of urban villages in the National Capital Region of Delhi that had continued due to their long-standing exclusion from formal planning processes.

My interdisciplinary education has led me to realize the need for policymakers to develop a strong sense of empathy with society and its ever-evolving facets before deploying technology-based solutions for its betterment and progress.

How would you like to see higher education evolve to better prepare Responsible Tech leaders?

It is time for us to reject technosolutionism. Emerging technologies are posing public policy problems that are wicked in nature, which means they are constantly changing their forms. To make sense of these problems and tackle them effectively, we must encourage collaborative consultations amongst stakeholders, representing diverse identities across social, political, economic, and cultural hierarchies. One way to cement this spirit of collaboration in policymaking around emerging technologies could be through an emphasis on interdisciplinary training across all technical disciplines. After all, Responsible Tech leaders ought to have a fair understanding of the society and its value systems.

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Where do you see the future of Responsible Tech headed?

Responsible tech is not just about developing guidelines, setting rules, and drafting laws to hold tech companies responsible when things go south. It is also about making everyday citizens responsible consumers of technology by informing them about the multitude of risks associated with the use of certain technologies.

In the last few years, technology companies, owing to their unethical business practices, have been on the receiving end of a lot of social and political backlash. I believe the situation for these companies would not have been this bad had the people been adequately informed about the risks of using various technology products & services.

Be that as it may. It is great that conversations around Responsible Tech have begun and the realization that technology is not neutral has set in. I believe these conversations should now be followed by concrete action. Ethicists and public policy practitioners should be actively involved in the process of developing and deploying new technologies. This would aid in ensuring that ethics is not an afterthought but is accounted for at all stages of the technology value chain.

Connect with Antara at @VatsAntara

"My interdisciplinary education has led me to realize the need for policymakers to develop a strong sense of empathy with society and its ever-evolving facets before deploying technology-based solutions for its betterment and progress."

-Antara Vats, Executive Lead-Strategy & Partnerships, AI Policy Exchange

Joel M. Carter

*A doctoral student at the University of Colorado at Boulder in the Information Science department**



Tell us about your current involvement in the Responsible Tech space:

I am currently involved in the Responsible Tech space in two ways.

First, I am a Postgraduate Research Fellow at Protego Press, a technology policy journal. I lead the "People of Color and Tech Policy" initiative which strives to amplify the voices of people of color in the tech space. This initiative serves as a platform where people of color identify critical issues at the cornerstone of technology and policy at all levels and aspects of

society. I also drive conversation about the nexus of technology and ethics in my writing for the journal. I recently published an op-ed that outlined the need for Technology Ethics Officers within city government.

Second, I am a Researcher at the Center for Media Engagement at The University of Texas at Austin where I research how geopropaganda is used to influence political discourse. Specifically, I am focused on the use of different surveillance technologies employed by state and non-state actors to

surveil protests in response to the death of George Floyd. I create transparency on this issue by investigating the capabilities, legality, and impact of surveillance technologies and methods.

What has been your educational journey so far?

My educational journey was one initially tailored towards business and entrepreneurship. Since elementary school, I was fascinated by technology from computer and video games to other devices like CD players. I never envisioned myself becoming an engineer, so I was unsure if having a career in technology was a viable option.

In high school I took mostly business, science, and language courses like basic accounting, economics, advanced algebra, Physics, Human anatomy, and Spanish. By the time I was a Senior I developed an interest for international business and how different countries work together to achieve economic ambitions. That interest led me to earn two Bachelor's degrees in International Business and French from Concordia College in Moorhead, Minnesota. However, by the time I graduated I felt the desire to build upon my knowledge from a policy angle.

In 2018 I began my Master's studies at the Lyndon B. Johnson School of Public Affairs at The University of Texas at Austin. I studied Global Policy with a concentration in International Finance and Trade. The experience trained me as policy professional and taught me global issues from an interdisciplinary approach. I earned my Master's in May of 2020 and discovered the need for policy professionals with a multi-disciplinary training in technology.

Following graduation, I found myself wanting to reconnect with my initial passion for technology and have continue to educate myself more about technology and gain technical skills.



How would you like to see higher education evolve to better prepare Responsible Tech leaders?

Higher education has an important role in shaping Responsible Tech leaders. As a master's student at UT-Austin, I had the opportunity to be a TA for an executive education course, Marketing in an Engineering environment. The course was offered within the Cockrell School of Engineering and taught engineers how to think beyond their initial training as developers of innovation and consider how the success of technology product is based on the value it delivers to the consumer. The largest takeaways students had at the end of the semester were two things: First, they expressed how valuable it was to understand the needs of consumers; and two, they admitted feeling embarrassed by how little they were previously taught on a seemingly irrelevant topic, which, in fact, was critical to the technological and innovative process.

I use this as an example to illustrate that higher education should create cross-disciplinary courses as a part of the core curriculum for aspiring engineers as well students from different academic backgrounds looking to have some cross-over with technology or engineering. In these courses, case studies featuring the ethical, legal, economic, and societal implications of failed and successful technologies should be taught to provide students with a wholistic view on the impact of innovation. Technology is omnipresent and affects how we live, work, and interact with one another. Higher education has a clear role and an ability to use its resources to better prepare Responsible Tech leaders and now is the time to capitalize on that opportunity.

Where do you see the future of Responsible Tech headed?

Responsible tech is just getting started and what lies ahead is the opportunity to influence how technology is developed and consumed. I believe a cultural shift amongst consumers is driving the demand for Responsible Technology as society understands more how technology fails us and the consequences of that failure. I think the clearest, most recent example comes from the case of Robert Julian-Borchak Williams; a Detroit resident who was arrested because police used facial recognition technology that wrongly identified as the perpetrator of crime.

Perhaps the greatest value technology offers is automation and society places a great amount of trust and hope in it under the pretense that our lives will be made easier. Yes, technology can and does help us but developing and deploying it without, let's say, understanding the bias technology learns from humans let alone analyzing its potentially harmful effect on society, is dangerous. As we continue to become more reliant on technology, both consumers and companies will place even higher value on Responsible Technology. I anticipate Responsible Technology roles, like Technology Ethics Officers, will become more commonplace in private enterprise and government and Responsible Tech becoming an integral part of the technological and innovative process.

**Joel M. Carter is now a Risk Management Analyst at TikTok*

Alia ElKattan

Developer of Survival of the Best Fit & Product Manager



Tell us about your current involvement in the Responsible Tech space:

Last year, I worked with three teammates & ex-classmates on Survival of the Best Fit (survivalofthebestfit.com), a Mozilla Creative Media Awardee and interactive explanation of bias in ML for those without a technical background, disguised as a quick game. Since then I've been wrangling Mozilla Festival, and most recently built a digital curation on the internet's place in the identities & societies of young

people across the globe called [Multiplicity](#).

What has been your educational journey so far?

I recently graduated from NYU Abu Dhabi with a B.S in Computer Science, where I focused my education on interdisciplinary applications of technology through minors in Political Science, Interactive Media, and Music Computing. I hope to go back to school to research the relationship between technology and political participation.

How would you like to see higher education evolve to better prepare Responsible Tech leaders?

I would like to see Responsible Tech education better integrated with "technical" classes, rather than existing as separate modules for a self-selecting group of students (or as 1 ethics requirement). On the flip-side, I'd like to see greater tech literacy among students of law, policy, and adjacent fields to better enable future community organizers, politicians, and policymakers to tackle tech policy.

What do you see the future of Responsible Tech headed?

I am cautiously optimistic about the future of Responsible Tech. While many individuals and communities are engaged in studying and building equitable and socially Responsible Technology, we should continue to be cognizant about what gets researched or built, and by who, so that the space does not get defined by (and become exclusively aligned with) particular governmental and corporate interests. I want to see the field be less siloed as "tech ethics" or "Responsible Tech" in exchange for greater understanding of (ir)Responsible Tech's place in broader political, economic, and social contexts, systems, and conversations.

Connect with Alia at [@aliaelkattan](https://twitter.com/aliaelkattan)

Shelly Bensal

Research Engineer at DeepMind, Co-creator of Ethics Models*



Tell us about your current involvement in the Responsible Tech space:

I'm currently a Research Engineer on a team within DeepMind that applies artificial intelligence and machine learning research to Google products and infrastructure. A key element of our work is thinking through and implementing how we can deploy our models responsibly and safely.

Earlier this year, I co-created Ethics Models with Tiffany Jiang. Ethics Models is a series of interviews of

ethicists within the tech industry, where we discuss their role, impact, takeaways, challenges, inspirations, and advice for others wanting to break into the field.

What has been your educational journey so far?

I did my undergraduate degree at Carnegie Mellon's School of Computer Science. I felt really lucky to learn in an academic environment of brilliant students and professors, many of whom were really passionate about using computer science for social good

projects, and thoughtful about building products responsibly.

I was also lucky enough to do a summer internship at Jigsaw, a unit within Google that, among other things, helps defend civil society, journalists, activists and those at the forefront of digital conflict through technology. It was one of the first times that I got a front row seat to see how powerful technology could be in tackling inequality and protecting human rights. It was a really inspiring and formative experience in my Responsible Tech journey, and has influenced the way that I approach my work ever since.

How would you like to see higher education evolve to better prepare Responsible Tech leaders?

I'd love to see ethics thinking embedded into computer science and engineering curriculums, and not just as a single class in a four year course of study or as a lecture in the final week of a class about artificial intelligence, but truly woven throughout degree programs. As engineers and computer scientists graduate and enter the workforce, I think it's critical they know how to think through the process of building something, and also whether they should build something. We're more than just cogs in the machine of a company -- I'd like engineers to internalize that we're ultimately accountable for what we create.

Connect with Shelly at [@ShellyBensal](#)

**Shelly's role has changed since our interview was first conducted.*

Shamika Goddard

A doctoral student at the University of Colorado at Boulder in the Information Science department



Tell us about your current involvement in the Responsible Tech space:

As the founder of the Tech Chaplaincy Institute, I help open and affirming, social justice-oriented faith communities and mission driven organizations go from where they are to where they want to be with their technology. We teach and train people on how to use the technology they have, as well as help them decide which new technologies to incorporate in order to better serve their communities. Using the best

practices of pastoral care and chaplaincy, a tech chaplain centers human beings in the technology and helps usher them through crises with dignity and grace. We help people move from fear and anxiety around technology to empowerment by equipping them with digital citizenry skills as well as digital literacies for ministry based on the toolkit from the E-formation Learning Center out of Virginia Theological Seminary. By equipping people and organizations with the know-how they need to fully unlock the potential of their technology, we are shifting the

power of technology into the hands of people who are serving others.

What has been your educational journey so far?

I grew up in San Antonio, TX, and attended engineering and math camps during the summers in middle and high school which fostered a love for coding and problem solving but was weeded out of an engineering/computer science path as a first-generation student at Stanford University.

After graduating with a degree in African and African-American Studies, I moved to New York to serve a year with AmeriCorps and decided to commit my life to service. In order to discern how and who to serve, I enrolled at Union Theological Seminary in the city of New York for a Master of Divinity. My academic focus shifted during my time there when I rediscovered my love of technology while helping my peers with their computers and G Suite accounts. Out of that work, I developed tech chaplaincy as an approach to tech support, inspired by best practices from chaplaincy and pastoral care, which centers humanity in technological issues and helps the individual find dignity and grace while ushering them to solutions and empowerment. By the end of seminary, I had also developed technowomanism, an interdisciplinary womanist theoretical approach to analyzing, understanding, and explaining the intersectional nature of the human experience within and outside of the digital space as well as in and around technology inspired by a personal need to respond to #GamerGate and #BlackLivesMatter.

Now, I am in a doctoral program at the University of Colorado at Boulder in the Information Science department studying technology, ethics, and social justice issues.

Continued on next page



How would you like to see higher education evolve to better prepare Responsible Tech leaders?

Instead of the rare ethics course in tech-related disciplines, ethics and social justice issues within technology could be threaded throughout every course in some fashion or another. The curriculum itself could support the development of discerning tech leaders who consider the dangers and marginalized people who may be affected by each major and minor decision.

When applying to Ph.D. programs, I was unaware of Information Science as an option and thankfully a friend and colleague, Nathan Schneider, pointed me to CU Boulder's iSchool as well as opened me up to the idea of iSchools in general. If computer science is doing things with computers, information science is thinking critically about, analyzing, and visualizing the things people do with computers. Information Science has evolved beyond Library Science, which is also important, and yet I still feel as though the discipline is young and not well known outside of its borders. There is a lot of good that can come from iSchools and collaborations or interdisciplinary work across disciplines can help elevate the conversations and research happening in Information Science.

Where do you see the future of Responsible Tech headed?

Since the tech lash, people are starting to demand more from the tech giants. Ideally, in the future, these organizations will truly step up and lead the conversations in ethical and Responsible Technology. There will be more than an ethics officer whose job is really compliance but instead it will be everyone's job from the top down and bottom up. The future of Responsible Tech will also be in the hands of smaller tech companies, individuals, scholars, students, institutions, think tanks, and other entities who think about or engage deeply with technology to further shape best practices, lessons learned, and spread the work that organizations like All Tech Is Human and Data and Society are engaged with.

Connect with Shamika at [@tech_chaplain](https://twitter.com/tech_chaplain)

"By equipping people and organizations with the know-how they need to fully unlock the potential of their technology, we are shifting the power of technology into the hands of people who are serving others." -**Shamika Goddard, doctoral student & founder of the Tech Chaplaincy Institute**

Organizations in Responsible Tech

There is a vibrant community filled with hundreds of organizations tackling issues related to Responsible Tech. Find the ones that are aligned with your goals and values, and get involved!

Are we missing an organization? Submit resources through AllTechIsHuman.org or directly to Sandra Khalil at Sandra@AllTechIsHuman.org.



ORGANIZATIONS IN RESPONSIBLE TECH

5Rights Foundation (@5RightsFound) *“The digital world as it exists today was not designed with children or young people in mind. It was designed by adults, for adults. 5Rights Foundation exists to redress the balance, and to work with others to build the digital world that children and young people deserve. Its work is centered around three goals: data protection regulation is established around the world for under 18s; safety by design is implemented as a global tech-industry norm for under 18s; and children’s rights are fully realised in the digital world. First conceived by Baroness Beeban Kidron, 5Rights developed from an idea into an organisation in 2018, and is now active in the UK, Brussels and California.”* 5rightsfoundation.com

Resource: [IEEE 2089-2021 Standard for Age Appropriate Digital Service Framework](#)

Access Now (@accessnow) *“Access Now defends and extends the digital rights of users at risk around the world. By combining direct technical support, comprehensive policy engagement, global advocacy, grassroots grantmaking, legal interventions, and convenings such as RightsCon, we fight for human rights in the digital age.”* Accessnow.org

Resource: [Digital Security Helpline](#), [RightsCon](#)

Access Partnership (@accessalerts) *“Global technology policy consulting dedicated to the mission of leading countries to Fair Tech.”* AccessPartnership.com

Resource: [Metaverse Policy Lab](#)

Accountable Tech (@accountabletech) *“Accountable Tech is a nonprofit that advocates for structural reforms to repair our broken information ecosystem and foster a healthier and more equitable democracy. We aim to remove or recalibrate the financial incentive for platforms to spread disinformation, discrimination, hate, extremism, etc. and incentive structural reform that centers and elevates the health and wellbeing of individuals and communities. “We are facing a crisis of truth. Accountable Tech advocates for the social media companies at the center of today’s information ecosystem to strengthen the integrity of their platforms and our democracy.”* Accountabletech.org

Resources: [Politics of an Antitrust Vote This Fall](#), [Global Implications of EU Digital Reforms](#), [How Big Tech Boosts Autocrats](#)

Ada Lovelace Institute (@AdaLovelaceInst) *“Through research, policy and practice, we aim to ensure that the transformative power of data and AI is used and harnessed in ways that maximise social wellbeing and put technology at the service of humanity.”* Adalovelaceinstitute.org

Resource: [Algorithms in Social Media: Realistic Routes to Regulatory Inspection](#)

Africa Digital Rights Hub (@hub_adr) *“The Africa Digital Rights’ Hub is a not-for-profit think tank registered in Ghana that advances and promotes research and advocacy on digital rights across the African continent. Interested in the impact of digital technology on people living in the Continent, the Hub brings together academic researchers, stakeholders, policy makers, regional and international bodies to address digital rights issues in Africa.”* Africadigitalrightshub.org



ORGANIZATIONS IN RESPONSIBLE TECH

Resource: [ADRH Blog](#)

AI4People (@Ai4People) “AI4People is a multi-stakeholder forum, bringing together all actors interested in shaping the social impact of new applications of AI.” eismd.eu/ai4people

Resource: [On Good AI Governance, Ethical Framework for a Good AI Society](#)

AI Education Project (@aiedu_org) “AI impacts all of our lives, no matter our job or education. Our multidisciplinary curriculum addresses the skills and knowledge necessary to thrive in and positively contribute to a society where AI and automation are increasingly a part of every industry.” aiedu.org

Resource: [AI Education Catalog](#)

AIEthicist.org “Alethicist.org is one of the first global repositories of reference and research material for researchers and advocates interested in the current work on AI ethics, responsible governance and impact of AI on individuals and society. This site is updated regularly with curated material on AI ethics, bias, governance frameworks, toolkits, legislation, AI ethics use cases, national strategies and XAI. The repository also hosts Merve Hickok's, founder of Alethicist.org, publications and contributions to the field.” aiethicist.org

AI Ethics Lab (@aiethicslab) “AI Ethics Lab aims to detect and solve ethical issues in building and using AI systems to enhance technology development. What makes the Lab different? We put ethics into action in all stages of the innovation process. We don't spend our time with debates, rules, codes, and approvals—we work with you to design solutions and build ethical systems.” Alethiclab.com

AI Ethics PhD Group “We are a community of doctoral and postdoctoral researchers dedicated to helping the world ethically adopt emerging technologies. AI will intersect with almost everything we do, we need researchers from many disciplines to work together to get this right!” phdaiethics.com

A.I. For Anyone (@aiforanyone) “We create and distribute free artificial intelligence education resources to underserved students. Our organization's mission is to 1) empower our audience to adapt and prosper in an increasingly automated world, and 2) democratize AI knowledge to enable all citizens to shape policy. We believe that education is the best tool to prepare students for a world with increased human-computer interactions.” aiforanyone.org

Resource: [Newsletter](#), [Podcast](#), [Workshops](#), [Toolkit](#)

AI For Good (@AI4Good) “We're leveraging AI to measure and accelerate progress towards the pursuit of the United Nations SDGs.” ai4good.org

Resource: [AI and Sustainable Development Goals](#)

AI for Peace (@AI4Peace) “Using AI for Creating Lasting Peace The AI for Peace is a San Francisco based nonprofit organization focused on studying and understanding the



ORGANIZATIONS IN RESPONSIBLE TECH

impacts of artificial intelligence (AI) and related exponential technologies on society.”
Alforpeace.org

Resource: [AI Explained: Non-Technical Guide for Policymakers](#)

AI for People (@AlforPeople) *“Our mission is to learn, pose questions and take initiative on how Artificial Intelligence technology can be used for the social good. Based in Italy.”* Alforpeople.org

Resource: [Educational Resources on AI](#)

AI For the People (@ai4thepppl) *“AFP’s mission is to educate Black communities about the racial justice implications in tech, & empower them to make their voices heard. We do this by creating content that illustrates how and why advanced technologies amplify racial bias, and then provide this information to Black communities so they can act.”*
aiforthepeopleus.org/

Resource: [Annual Report](#)

AI Forum New Zealand (@AIForumNZ) *“The Artificial Intelligence Forum of New Zealand is here to connect, promote and advance New Zealand’s AI ecosystem.”*
Aiforum.org.nz

Resource: [AI Summit](#), [AI EnviroHack](#)

AI Inclusive (@AIinclusive) *“The AI Inclusive welcomes women and non-binary folks interested in Artificial Intelligence. Our events are free of charge and we meet to discuss and learn AI related topics and to socialize.”* Ai-inclusive.org

AI Infrastructure Alliance (@AiInfra) *“The AI Infrastructure Alliance is helping make the canonical stack in AI/ML a reality, by bringing together the essential building blocks for the Artificial Intelligence applications of today and tomorrow. We represent some of the top venture backed companies, projects and service providers in the rapidly developing AI/ML space.”* Ai-infrastructure.org

Resource: [AI Infrastructure Ecosystem Report](#), [AI Infrastructure Landscape](#), [MLTRL](#)

AI Now Institute (@AINowInstitute) *“The AI Now Institute at New York University is an interdisciplinary research center dedicated to understanding the social implications of artificial intelligence.”* ainowinstitute.org

Research Areas: [How to Interview a Tech Company](#)

AI Policy Exchange (@aipolex) *“One-stop platform for publishing and reading the most pressing discourses on AI policy and governance.”* Aipolicyexchange.org

Resources: [AI + You](#)

AI4All (@ai4allorg) *“AI4ALL is a US-based nonprofit dedicated to increasing diversity and inclusion in AI education, research, development, and policy. AI4ALL is a team of*



ORGANIZATIONS IN RESPONSIBLE TECH

multidisciplinary experts. Our curriculum is developed in-house by experts who have experience with CS and AI education, with the support of advisors who are leaders in academia and industry.” [AI-4-all.org](https://ai-4-all.org)

Resources: [Changemakers in AI](#), [College Pathways](#), [Summer Programs](#)

Alan Turing Institute (@turinginst) *“We are the national institute for data science and artificial intelligence. We believe data science and artificial intelligence will change the world. We are pioneers; training the next generation of leaders, shaping the public conversation, and pushing the boundaries of these sciences for the public good.”*

[Turing.ac.uk](https://turing.ac.uk)

Resource: [Theory and Method Challenge Fortnights](#)

Algorithmic Governance Research Network (@AlgorithmicGov1) *“Algorithmic Governance is an interdisciplinary research network dedicated to understanding the social implications of artificial intelligence, big data, platform capitalism, datafied knowledge, and automated decision-making on society.”* [Algorithmic-governance.com](https://algorithmic-governance.com)

Resources: [Reading List](#), [Black Box Podcast](#)

Algora Lab (@AlgoraLab) *“ALGORA lab develops a deliberative approach to the ethics of AI and digital innovation, and examines the societal and political impacts of the algorithmic society.”* [Algoralab.ca](https://algoralab.ca)

Resources: [AI Civic Forum](#), [Advancing Sustainable Robotics](#)

Algorithmic Justice League (@AJLUnited) *“The Algorithmic Justice League’s mission is to raise awareness about the impacts of AI, equip advocates with empirical research, build the voice and choice of the most impacted communities, and galvanize researchers, policy makers, and industry practitioners to mitigate AI harms and biases. We’re building a movement to shift the AI ecosystem towards equitable and accountable AI.”* [AJL.org](https://ajl.org)

Resources: [Coded Bias Documentary](#), [Facial Recognition Technologies in the Wild](#)

AlgorithmWatch (@algorithmwatch) *“Non-profit research and advocacy organization to evaluate and shed light on algorithmic decision making processes that have a social relevance, meaning they are used either to predict or prescribe human action or to make decisions automatically. Also keeps a shared inventory of AI related principles.”* Algorithmwatch.org/en

Resource: [Automating Society Report](#)

ALLAI (@ALLAI_EU) *“ALLAI is an independent organization dedicated to drive and foster Responsible AI. ALLAI is an initiative of Catelijne Muller, Virginia Dignum and Aimee van Wynsberghe, the three Dutch members of the EU High Level Expert Group on Artificial Intelligence.”* allai.nl

Resource: [Projects and Programs](#)



ORGANIZATIONS IN RESPONSIBLE TECH

Alliance for Peacebuilding (@AfPeacebuilding) *“The group is an open community of practice to advance “digital peacebuilding”, defined as the analysis of and response to online conflict dynamics and the harnessing of digital tools to amplify peacebuilding outcomes.”* allianceforpeacebuilding.org/digital-peacebuilding-cop

Resource: [PeaceCon@10](#)

All Tech Is Human (@AllTechIsHuman) *“All Tech Is Human is a non-profit committed to connecting and expanding the Responsible Tech ecosystem so we can co-create a better tech future. We do this through a variety of activities focused around three key areas: multi-stakeholder convenings & community-building, multidisciplinary education, and diversifying the pipeline with more backgrounds and lived experiences. Our organization has a large community Slack group, regular summits & mixers, a mentorship program, university ambassadors program, open working groups that develop reports, office hours, a job board, and our Responsible Tech Guide.”* AllTechIsHuman.org

Resources: [Responsible Tech Job Board](#), [Responsible Tech Talent Pool](#), community Slack group, [AI & Human Rights](#) report, [HX Report](#), [Improving Social Media](#) report, [all projects & events](#)

American Civil Liberties Union (ACLU) (@ACLU). *“The ACLU is a non-profit, non-partisan organization of people who believe in the power of action. We are united by the quest - “We the people dare to create a more perfect union.” Whether in the courts, statehouses, Congress or communities, we fight to defend the rights that the Constitution guarantees to all of us – regardless of who we are, where we come from, whom we love, or what we believe. Together, we take up the toughest civil rights and liberties challenges of our time. We seek to inspire those who want change to become the ones who make change.”* aclu.org

Resource: [Privacy and Technology](#)

Allen Institute for Artificial Intelligence (@allen_ai). *“AI2 is a non-profit focused on contributing to AI research and engineering efforts intended to benefit the common good.”* Allenai.org

Resource: [AI2 Incubator](#)

The American Society of Mechanical Engineers (@ASMEdotorg) *“ASME is a not-for-profit membership organization that enables collaboration, knowledge sharing, career enrichment, and skills development across all engineering disciplines, toward a goal of helping the global engineering community develop solutions to benefit lives and livelihoods.”* ASME.org

Resource: [Topics and Resources](#)

Amnesty Tech, Amnesty International (@AmnestyTech, @amnesty) *“Amnesty Tech is a global collective of advocates, hackers, researchers and technologists. We aim to: Bolster social movements in an age of surveillance; Challenge the systemic threat to our rights posed by the surveillance-based business model of the big tech companies; Ensure accountability in the design and use of new and frontier technologies;*



ORGANIZATIONS IN RESPONSIBLE TECH

Encourage innovative uses of technology to help support our fundamental rights.”
[amnesty.org/en/tech](https://www.amnesty.org/en/tech)

Resources: [Disrupting Surveillance](#), [Big Data and AI](#), [Censorship](#)

anch.AI (@anch_AI) *“Established to create a world-leading multidisciplinary hub to address the scaling of AI in broader ethical and societal contexts.”* [Alsustainability.org](https://www.alsustainability.org)

AnitaB.org (@AnitaB_org) *“We envision a future where the people who imagine and build technology mirror the people and societies for whom they build it.”* [AnitaB.org](https://www.anitab.org)

Resources: [Career Toolbox](#), [AnitaB.org Mentorship](#)

Article 19 (@article19org) *“ARTICLE 19 works for a world where all people everywhere can freely express themselves and actively engage in public life without fear of discrimination. They do this by working on two interlocking freedoms: the Freedom to Speak, and the Freedom to Know. When either of these freedoms come under threat, ARTICLE 19 speaks with one voice.”* [article19.org](https://www.article19.org)

Resource: [Campaigns](#)

The Asia Foundation (@Asia_Foundation) *“The Asia Foundation is a nonprofit international development organization committed to improving lives across a dynamic and developing Asia. Through their emerging issues lab they examine shifting labor markets, how to help workers adapt, and setting a policy agenda for a future of work that promotes prosperity, jobs, and inclusive growth.”* [AsiaFoundation.org](https://www.asiafoundation.org)

Resource: [Annual Report](#)

Asian Americans Advancing Justice - Telecommunications and Technology (@AAAJ_AAJC) *“As access to technology transitions from being a benefit to an absolute necessity in our everyday lives, understanding the telecommunications- and technology-related needs of our diverse community becomes increasingly important. While digital innovation continues to be a boon for Asian Americans, it also represents a potential source of mischief and real-world harm. Our work focuses on ensuring that the principles of opportunity, fairness, and equity are protected online.”*
[advancingjustice-aajc.org/telecommunications-and-technology](https://www.advancingjustice-aajc.org/telecommunications-and-technology)

Resource: [Wholestory Education \(WE\) Campaign](#)

Aspen Cybersecurity (@AspenInstitute; @AspenCyber) *“The Aspen Cybersecurity Group is the nation’s leading cross-sector, public-private cybersecurity forum comprising former government officials, Capitol Hill leaders, industry executives, and respected voices from academia, journalism, and civil society that work to translate pressing cybersecurity conversations into action.”*
[aspeninstitute.org/programs/aspen-cybersecurity-group](https://www.aspeninstitute.org/programs/aspen-cybersecurity-group)

Resource: [Aspen Cyber Summit](#)

Aspen Digital (@AspenInstitute; @AspenDigital) *“We empower policy makers,*



ORGANIZATIONS IN RESPONSIBLE TECH

civic organizations, companies, and the public to be responsible stewards of technology and digital media in the service of a more just and equitable world.”

[Aspeninstitute.org](https://www.aspeninstitute.org)

Resource: [The Future of Social Connection, Loneliness, and Technology](#)

Aspen Tech Policy Hub (@AspenPolicyHub) *“The Aspen Tech Policy Hub is a West Coast policy incubator, training a new generation of tech policy entrepreneurs. Modeled after tech incubators like Y Combinator, we take tech experts, teach them the policy process through an in-residence fellowship program in the Bay Area, and encourage them to develop outside-the-box solutions to society’s problems.”*

[AspenTechPolicyHub.org](https://www.AspenTechPolicyHub.org)

Resource: [Aspen Tech Policy Hub Projects](#)

The Association for the Advancement of Artificial Intelligence (AAAI)

(@RealAAAI) *“Nonprofit scientific society devoted to advancing the scientific understanding of the mechanisms underlying thought and intelligent behavior and their embodiment in machines. AAAI aims to promote research in, and responsible use of, artificial intelligence. AAAI also aims to increase public understanding of artificial intelligence, improve the teaching and training of AI practitioners, and provide guidance for research planners and funders concerning the importance and potential of current AI developments and future directions.”* [Aaai.org](https://www.Aaai.org)

Resources: [AI Magazine](#), [Digital Library](#)

Atlantic Council (@AtlanticCouncil) *“The Atlantic Council promotes constructive leadership and engagement in international affairs based on the Atlantic Community’s central role in meeting global challenges. The Council provides an essential forum for navigating the dramatic economic and political changes defining the twenty-first century by informing and galvanizing its uniquely influential network of global leaders.”* [Atlanticcouncil.org](https://www.Atlanticcouncil.org)

Resources: [GeoTech Center](#), [Digital Forensic Research Lab](#)

Atomium European Institute for Science, Media and Democracy (EISMD)

(@Atomium_EISMD) *“Atomium-EISMD convenes leading European universities, media, global businesses, policy-makers and governments to develop innovative initiatives and frontier thinking grounded on scientific research, thus providing evidence-based analysis as well as advice in governmental and decision-making processes.”* [Eismd.eu](https://www.Eismd.eu)

Resource: [Post-Covid Summit](#)

The Australia Institute, Center for Responsible Technology (@theausinstitute)

“The Centre for Responsible Technology is an initiative of the Australia Institute which exists to give people agency and influence over the way network technology is rapidly changing our world by asking a simple question ‘What is Good?’”

[australiainstitute.org.au](https://www.australiainstitute.org.au)

Resources: [Projects](#), [Reports](#)



ORGANIZATIONS IN RESPONSIBLE TECH

Avaaz (@avaaz) "Avaaz is a global web movement to bring people-powered politics to decision-making everywhere. Avaaz empowers millions of people from all walks of life to take action on pressing global, regional and national issues, from corruption and poverty to conflict and climate change. Our model of internet organising allows thousands of individual efforts, however small, to be rapidly combined into a powerful collective force." [Avaaz.org](https://avaaz.org)

Resource: [Disinfo Hub](#)

Betalab (@betaworksVC) "An early-stage investment program for startups aiming to Fix The Internet." betaworksventures.com/betalab

Resource: [Application for Cohort 2 of the Betalab funding program](#)

Berggruen Institute (@berggruenInst) "Exploring new ideas across tech, governance & philosophy in an era of great transformations." Berggruen.org

Resource: [The Berggruen Fellowship Program](#)

Better Images of AI (@ImagesofAI) "Community project building an image repository of more inclusive and representative images of AI. Current stock photos are typically of shiny gendered robots, glowing blue brains or the Terminator, which set unrealistic expectations, and hinder wider understanding of the technology. Ultimately this affects public understanding and critical discourse around AI and technology. BloAI project aims to showcase methods of reimagining visual depictions of AI products, applications, concepts, and use, inviting collaboration and input globally from anyone working in relevant or adjacent fields." betterimagesofai.org

Resource: [Images of AI Library](#)

Better Tech Network "Better Tech Network is a global collective of interdisciplinary students and young professionals leading conversations and taking action towards a brighter tech future. Our network encourages people to rethink technology through awareness, empowerment, and advocacy." bettertech.network

Big Data & Society (@BigDataSoc) "Open access peer-reviewed journal connecting debates on emerging Big Data practices and how they reconfigure academic, social, industry, and government relations." journals.sagepub.com/home/bds

#Black and Brilliant (@_BlkNBrilliant) "All #BlackandBrilliant initiatives are data and insight-driven, with a strong audience focused approach - in all aspects of our story, ethos and partnerships. We are committed to working towards solutions to fix pipeline issues that empower and support our communities...The #BlackandBrilliant mindset is one of growth, personal development, paired with the support of our allies and partnerships. Our impact will be measured by different qualitative data forms: surveys, testimonials, advocacy, test-and-learn practices." blackandbrilliant.org

Resource: [Get Involved](#)

Black in AI (@black_in_ai) "A place for sharing ideas, fostering collaborations and discussing initiatives to increase the presence of Black people in the field of Artificial Intelligence." Blackinai.org

Resource: [Programs](#)



ORGANIZATIONS IN RESPONSIBLE TECH

BlackInData (@BlkInData) “*Black in Data represents a community of academics, professionals, and students working in various areas of data. We gather to support, learn from, and share opportunities with one another, and ultimately increase representation of Black people in data fields.*” blkindata.github.io

Resource: [Black in Data Week](#)

Black in Data (@Blackin_Data) “*Black in Data (UK) is a collaborative movement for people of color, striving to promote equality of opportunity and representation within the data industry.*” blackindata.co.uk

Resources: [Job Board](#), [Mentorship](#)

#BlackTechFutures Research Institute “*Growing a National Black Tech Ecosystem through research, #blacktechpolicy, and data-driven intervention.*” blacktechfutures.com

Resource: [Black Tech Policy Week](#)

Black Women in Data (@BlkWomenInData) “*We center Black women's POV in all spaces where #data lives.*” blackwomenindata.com

Black Women Talk Tech (@BWTalkTech) “*We are a collective of black women tech founders who have a unique understanding of the challenges we face in the industry, but also of the advantages we can bring.*” NYC. blackwomentalktech.com

Resources: [Job Board](#), [Programs](#)

TheBridge (@TheBridgeWork) “*TheBridge is a non-partisan organization breaking down silos and connecting professionals across technology, policy and politics – building stronger, more collaborative relationships. We believe mutual understanding will lead to further collaboration among these cultures. As a neutral organization, TheBridge provides a unique forum for productive discussions on hotly debated issues. We host a tech, policy, politics jobs board and a career platform helping translate career skills between these industries, we convene our members, make connections and provide resources on our website including a searchable leaders database.*” Thebridgework.com

Resources: [TheBridge Leaders Directory](#), [TheBridge Job Board](#)

Build Tech We Trust (@buildtechtrust) “*We are a collective of tech CEOs, activists, changemakers, and workers who believe the time to act to counter the hate and terrorism is now. We believe technology should improve the human experience and quality of life for everyone, and that tech companies and leaders should take responsibility for the harm caused by their platforms and tools. We believe technology has the power to transform our lives for the better, but only if we prioritize people over the gains for the few. Today, we invite you to join us in changing the way we build and use tech.*” BuildTechWeTrust.com

Resource: [Readings and Resources](#)



ORGANIZATIONS IN RESPONSIBLE TECH

Business & Human Rights Resource Centre (@BHRRC) “We work with everyone to advance human rights in business. We track over 9000 companies, and help the vulnerable eradicate abuse. We empower advocates. We amplify the voices of the vulnerable, and human rights advocates in civil society, media, companies, and governments. We strengthen corporate accountability. We help communities and NGOs get companies to address human rights concerns, and provide companies an opportunity to present their response. We build corporate transparency. We track the human rights policy and performance of over 9000 companies in over 180 countries, making information publicly available.” business-humanrights.org/en

Resource: [Technology & Human Rights](#)

Business for Social Responsibility (BSR) (@BSRnews) “BSR™ is an impact-driven sustainability organization that works with its global network of leading companies to create a world in which all people can thrive on a healthy planet. With offices in Asia, Europe, and North America, BSR™ provides insight, advice, and collaborative initiatives to help business see a changing world more clearly, create long-term value, and scale impact.” bsr.org

Resource: [Human Rights](#)

Carnegie Endowment for International Peace (@CarnegieEndow) “In a complex, changing, and increasingly contested world, the Carnegie Endowment helps countries take on the most difficult global problems and safeguard peace and security through independent analysis, strategic ideas, support for diplomacy, and training the next generation of international scholar-practitioners.” carnegieendowment.org

Resource: [Technology and International Affairs](#), [Cyber Policy Initiative](#)

Center for AI and Digital Policy (@theCAIDP) “The Center for AI and Digital Policy aims to promote a better society, more fair, more just – a world where technology promotes broad social inclusion based on fundamental rights, democratic institutions, and the rule of law.” [Caidp.org](https://caidp.org)

Resources: [AI Frameworks, Artificial Intelligence and Democratic Values - 2021 Report](#)

Center for Data Innovation (@DataInnovation) “The Center for Data Innovation conducts independent research and formulates public policies to enable data-driven innovation in the public and private sector.” [Datainnovation.org](https://datainnovation.org)

Resources: [More Than Meets The AI: The Hidden Costs of a European Software Law](#), [Principles to Promote Responsible Use of AI for Workforce Decisions](#), [The Artificial Intelligence Act: A Quick Explainer](#)

Center for Data Ethics and Innovation (@CDEIUK) “We’re tasked by the Government to connect policymakers, industry, civil society, and the public to develop the right governance regime for data-driven technologies.” gov.uk/government/organisations/centre-for-data-ethics-and-innovation



ORGANIZATIONS IN RESPONSIBLE TECH

Center for Democracy & Technology (@CenDemTech) *“The Center for Democracy & Technology is a 501(c)(3) working to promote democratic values by shaping technology policy and architecture, with a focus on the rights of the individual. CDT supports laws, corporate policies, and technological tools that protect privacy and security and enable free speech online.”* cdt.org

Resource: [CDT Reports and Insights](#)

Center for Humane Technology (@HumaneTech_) *“We are a team of deeply concerned technologists, policy experts, and social impact leaders who intimately understand how the tech industry’s culture, techniques, and business models control 21st century digital infrastructure. Together with our partners, we are dedicated to radically reimagining technology for the common good of humanity.”* Humanetech.com

Resources: [Collection of Resources](#), [Foundations of Humane Technology](#)

Center for Inclusive Change *“At The Center for Inclusive Change, we guide organizations to help them bring together the three critical business practices that are essential in ensuring AI is human-centered, sustainable, fair, and equitable: 1) sound DEI&B practices (the foundation); 2) governance-centered AI policy / procedure / structure (the framework), and 3) inclusive change management (where the rubber meets the road). Our approach is purposefully practical and instructive, because failure is not an option when it comes to safe AI.”* inclusivechange.org

Resource: [AI Governance Solutions](#)

Center for Technology & Society at the ADL (@ADL) *“ADL’s Center for Technology and Society (CTS) leads the global fight against online hate and harassment. In a world riddled with antisemitism, bigotry, extremism and disinformation, CTS acts as a fierce advocate for making digital spaces safe, respectful and equitable for all people.”* adl.org/research-centers/center-technology-society

Resources: [The Online Hate Index](#), [Center on Extremism](#), [Center for Technology and Society](#), [Hate on Display™ Hate Symbols Database](#)

The Centre for Internet and Society (CIS) (@cis_india) *“Non-profit organisation based in India that undertakes interdisciplinary research on internet and digital technologies from policy and academic perspectives. The areas of focus include digital accessibility for persons with diverse abilities, access to knowledge, intellectual property rights, openness, internet governance, telecommunication reform, digital privacy, and cyber-security.”* CIS-india.org

Centre for Technomoral Futures (@CentreTMFutures) *“Our mission at the Centre for Technomoral Futures is to unify technical and moral modes of future-building expertise in new models of research, education, design and engagement that directly serve the goals of sustainable, just and ethical innovation...The Centre for Technomoral Futures is a home for developing more constructive modes of innovation: innovation that preserves and strengthens human ties and capabilities; that builds more accessible and just paths to public participation in the co-creation of our futures; and that reinvests the power of technology into the repair, maintenance and care of our communities and our planet.”* technomorfutures.uk

Resource: [Educational Courses](#)

ORGANIZATIONS IN RESPONSIBLE TECH

Center for Strategic and International Studies (@CSIS) *“The Center for Strategic and International Studies (CSIS) is a bipartisan, nonprofit policy research organization dedicated to advancing practical ideas to address the world’s greatest challenges.”*
[csis.org](https://www.csis.org)

Resource: [Cybersecurity and Technology](#)

Change the Terms (@changeterms) *“To ensure that companies are doing their part to help combat hateful conduct on their platforms, organizations in this campaign will track the progress of major tech companies – especially social media platforms – to adopt and implement these model corporate policies and give report cards to these same companies on both their policies and their execution of those policies the following year.”* [changetheterms.org](https://www.changetheterms.org)

Resource: [Resources](#)

Citizen Browser (The Markup) (@themarkup) *“The Markup, a nonprofit newsroom that investigates how the world’s most powerful institutions use technology to reshape society, today announced the development of The Citizen Browser Project—an initiative designed to measure how disinformation travels across social media platforms over time.”* themarkup.org/series/citizen-browser

Resource: [Citizen Browser](#)

Citizen Digital Foundation (@Citizendigital1) *“Citizen Digital Foundation aims to promote safe and responsible navigation and innovation in the digital ecosystem...We address issues of digital distraction, cybersecurity, attention harvesting, subconscious behaviour manipulation, disinformation, polarisation and teenage mental health through interventions, consultancy, and advisory for students, educators, parents, media professionals, corporates, technologists, entrepreneurs and policy makers.”*
citizendigitalfoundation.org

Resource: [Global Conversations](#)

The Civil Infrastructure Platform (CIP) (@cip_project) *“A collaborative, open source project hosted by the Linux Foundation. The CIP project is focused on establishing an open source “base layer” of industrial grade software to enable the use and implementation of software building blocks in civil infrastructure projects.”* [CIP-project.org](https://cip-project.org)

Resource: [CIP Project Blog](#)

Clean Up the Internet (@InternetClean) *“Independent, UK-based organisation concerned about the degradation in online discourse and its implications for democracy.”* cleanuptheinternet.org.uk

Clean Up Twitter *“Online forum for interdisciplinary discussions of combating online hate on all platforms.”*

Resource: [The Forum](#)



ORGANIZATIONS IN RESPONSIBLE TECH

Code for America (@codeforamerica) *“We are a network of people making government work for the people, by the people, in the digital age. How do we get there? With government services that are simple, effective, and easy to use, working at scale to help all Americans, starting with the people who need them most.”*
[Codeforamerica.org](https://codeforamerica.org)

Code for Canada (@code4ca) *“Code for Canada is a national nonprofit that connects government innovators with the tech and design community. Our programs enable governments to deliver better digital public services and empower communities to solve civic challenges using technology and design.”* [Codefor.ca](https://codefor.ca)

Resource: [Code for Canada Fellowship](#)

Code2040 (@Code2040) *“Code2040 is a community of Black and Latinx technologists and their allies who are diversifying tech to create a more equitable, inclusive, and prosperous economy.”* [Code2040.org](https://code2040.org)

Resources: [Early Career Accelerator Program \(ECAP\)](#), [Code2040 Fellows](#)

Coding It Forward (@CodingItForward) *“Coding it Forward is a nonprofit by and for early-career technologists creating new opportunities and pathways into public interest technology. Coding it Forward is empowering the next generation of technology leaders to innovate at the intersections of technology and public service in local, state, and federal offices across the United States through their Civic Digital Fellowship and Civic Innovation Corps programs.”* codingitforward.com

Resources: [Civic Digital Fellowship](#), [Civic Innovation Corps](#), [Newsletter](#)

CodingRights (@CodingRights) *“Coding Rights is a Brazilian-based think tank that aims to advance the enforcement of human rights in the digital world. Its goal is to ensure that policy-making affecting technological development and digital rights is informed by actual technological knowledge, and that technological development is guided by fundamental human rights.”* codingrights.org

Resource: [Resources](#)

CognitionX *“Our mission is to democratize and radically improve access to knowledge, resulting in accelerated adoption of transformational technology, safe and responsible deployment, and benefits that flow to everybody.”* [Cognitionx.com](https://cognitionx.com)

Collective Action in Tech (@tech_actions) *“The tech industry is rife with unfair treatment of workers of all stripes and the development of products harmful to our communities. The most effective path to address these issues is for workers to leverage their collective strength to push companies in the right direction. Collective Action in Tech started as a project to document those collective actions and has evolved into a platform for workers to tell their stories, share resources, and theorize the tech workers movement together. Through experimentation and open-ended dialogue, we want to create a space for us to reflect on the tech worker movement’s past, and invent its future.”* collectiveaction.tech



ORGANIZATIONS IN RESPONSIBLE TECH

Common Sense Media (@CommonSense) “Common Sense has been the leading source of entertainment and technology recommendations for families and schools...Together with policymakers, industry leaders, and global media partners, we're building a digital world that works better for all kids, their families, and their communities.” [Commonsensemedia.org](https://commonsensemedia.org)

Resource: [Tweens, Teens, Tech, and Mental Health: Coming of Age in an Increasingly Digital, Uncertain, and Unequal World 2020](#)

Community Tech Network (@commtechnetwork) “Community Tech Network transforms lives through digital literacy. Focused on older adults and decreasing the digital divide. Based in Austin & San Francisco.” [Communitytechnetwork.org](https://communitytechnetwork.org)

Resource: [Resources](#)

Confederation of Laboratories for Artificial Intelligence Research in Europe (CLAIRE) (@vision_claire) “CLAIRE seeks to strengthen European excellence in AI research and innovation. The network forms a pan-European Confederation of Laboratories for Artificial Intelligence Research in Europe. Its member groups and organisations are committed to working together towards realising the vision of CLAIRE: European excellence across all of AI, for all of Europe, with a human-centred focus.” claire-ai.org

Resource: [Important Documents](#)

ConnectSafely (@ConnectSafely) “ConnectSafely.org is a Silicon Valley, California-based nonprofit organization dedicated to educating users of connected technology about safety, privacy and security. Here you'll find research-based safety tips, parents' guidebooks, advice, news and commentary on all aspects of tech use and policy.” [Connectsafely.org](https://connectsafely.org)

Resources: [Educator Guides](#), [Printable Quick Guides](#)

Consentful Tech Project (@consentfultech) “The Consentful Tech Project raises awareness, develops strategies, and shares skills to help people build and use technology consentfully.” consentfultech.io/

Resources: [2021 Consentful Tech Curriculum](#), [Building Consentful Tech](#)

Contract for the Web (@webfoundation) “A global plan of action to make our online world safe and empowering for everyone” Contract launch, 2018: Founder: Sir Tim Berners-Lee.” [Webfoundation.org](https://webfoundation.org) & [Contractfortheweb.org](https://contractfortheweb.org)

Resource: [Algorithmic Accountability: Applying the concept to different country contexts](#)

Council for Big Data, Ethics, and Society “Brings together researchers from diverse disciplines – from anthropology and philosophy to economics and law – to address issues such as security, privacy, equality, and access in order to help guard against the repetition of known mistakes and inadequate preparation.” [Bdes.datasociety.net](https://bdes.datasociety.net)

Resource: [Council Explorations and Findings](#)



ORGANIZATIONS IN RESPONSIBLE TECH

Countering Crime (@CounteringCrime) *“Team of experts in online-trafficking, extremism/terrorism and tech policy. Let's make the Internet safer.”*
counteringcrime.org

Resources: [The ESG Report: Organized Crime and Terror on Facebook, WhatsApp, Instagram and Messenger](#)

Coworker.org (@teamcoworker) *“At Coworker.org, we deploy digital tools, data, and strategies in service of helping people improve their work lives. Coworker.org is a laboratory for workers to experiment with power-building strategies and win meaningful changes in the 21st century economy.”* coworker.org

Resource: [For Workers in Tech](#)

Crisis Text Line (@CrisisTextLine) *“Crisis Text Line provides free, 24/7, high-quality text-based mental health support and crisis intervention by empowering a community of trained volunteers to support people in their moments of need.”* crisistextline.org

Resource: [Crisis Text Line Resources](#)

Cyber Civil Rights Initiative (@CCRIinitiative) *“Empowering victims of nonconsensual porn (NCP) to become stewards of their own life and doing everything in our power to eradicate NCP altogether. CCRI’s Mission is to combat online abuses that threaten civil rights and civil liberties. CCRI’s Vision is of a world in which law, policy and technology align to ensure the protection of civil rights and civil liberties for all.”*
cybercivilrights.org

Cyber Collective (@getcyco) *“We empower people to think critically about their relationship with the internet, while helping them become secure and private online.”*
Cybercollective.org

Resource: [Resources](#)

CyberPeace Institute (@Cyberpeaceinst) *“A Cyberspace at peace, for everyone, everywhere.” Based in Geneva, Switzerland.* cyberpeaceinstitute.org

Resource: [The COVID-19 Infodemic: When One Epidemic Hides Another](#)

Cybersecurity Talent Initiative (Operating partner of Partnership for Public Service) *“A public-private coalition connecting the best and brightest new technologists with high impact opportunities to protect the nation.”*
cybertalentinitiative.org

The Cybersmile Foundation (@cybersmilehq) *“The Cybersmile Foundation is a multi-award-winning nonprofit organization committed to digital wellbeing and tackling all forms of bullying and abuse online. We work to promote kindness, diversity and inclusion by building a safer, more positive digital community. Through education, research, awareness campaigns and the promotion of positive digital citizenship we reduce incidents of cyberbullying and through our professional help and support services we empower those affected and their families to regain control of their lives.*

Resources: [Awareness Campaigns](#), [Research](#), [Education](#)



ORGANIZATIONS IN RESPONSIBLE TECH

CyberWise (@BeCyberwise) *“CyberWise is a resource site for BUSY grownups who want to help youth use digital media safely and wisely. It is the companion site to Cyber Civics, our comprehensive digital literacy program for middle school.”* [Cyberwise.org](https://www.cyberwise.org)

Resource: [Learning Hubs](#)

Dangerous Speech Project (@dangerousspeech) *“The Dangerous Speech Project was founded in 2010 to study speech (any form of human expression) that inspires violence between groups of people – and to find ways to mitigate this while protecting freedom of expression.”* [Dangerousspeech.org](https://www.dangerousspeech.org)

Resources: [Counterspeech: A Literature Review](#), [Data Detox Kit: Alternative app centre](#), [Data Detox Kit: Wellbeing essentials](#)

DataDotOrg (@DataDotOrg) *“data.org is a platform for partnerships to build the field of data science for social impact. We envision a world that uses the power of data science to tackle society’s greatest challenges. We work with organizations from all over the world to increase the use of data science in order to improve the lives of millions of people.”* [data.org](https://www.data.org)

Resource: [Guides and Resources](#)

DataEthics (@DataEthicsEU) *“DataEthics is a politically independent ThinkDoTank based in Denmark with a European (and global) outreach. We work to promote data ethical products and services and provide knowledge, collaboration and consultation on data ethics for businesses, educational institutions, organizations, individuals and decision-makers from a technical, organizational, legal as well as social perspective.”* [dataethics.eu](https://www.dataethics.eu)

Resource: [International Forum on Digital and Democracy](#)

DataEthics4All (@DataEthics4All) *“The Mission of the DataEthics4All Initiative is to raise awareness on the Ethical use of Data, build the next generation of Inclusive AI and be a Catalyst in building a more Equitable, Inclusive, Culture Rich, Just and Ethical Society.”* [dataethics4all.org](https://www.dataethics4all.org)

Resource: [AI Diet Magazine](#)

Data for Black Lives (@Data4BlackLives) *“Data for Black Lives is a movement of activists, organizers, and mathematicians committed to the mission of using data science to create concrete and measurable change in the lives of Black people.”* [d4bl.org](https://www.d4bl.org)

Resource: [D4BL Conference](#)

DataKind (@DataKind) *“We bring together top data scientists with leading social change organizations to collaborate on cutting-edge analytics and advanced algorithms to maximize social impact...From evening or weekend events to multi-month projects, all are designed to provide social organizations with the pro bono data science innovation team they need to tackle critical humanitarian issues in the fields of education, poverty, health, human rights, the environment and cities.”* [datakind.org](https://www.datakind.org)

Resource: [Case Studies](#)



ORGANIZATIONS IN RESPONSIBLE TECH

Data-Pop Alliance (@datapopalliance) *“Data-Pop Alliance is a non-profit “think-and-do-tank” created in 2013 by the Harvard Humanitarian Initiative, MIT Connection Science, and ODI that brings together researchers, practitioners, and activists who want to “Change the World with Data” through 3 pillars of work: diagnosing local realities and human problems with data and AI; mobilizing capacities, communities, and ideas towards more data literate and inclusive societies; and ultimately, transforming the systems and processes that underpin our datafied communities and countries.”* datapopalliance.org

Resource: [Overview and Outlook 2020-2022](#)

Data & Society (@datasociety) *“Data & Society is an independent nonprofit research organization. We believe that empirical evidence should directly inform the development and governance of new technology. We study the social implications of data and automation, producing original research to ground informed, evidence-based public debate about emerging technology.”* datasociety.net

Resource: [Reorienting Platform Power](#)

Derechos Digitales (@derechosdigital) *“Human Rights, technology and public interest for Latin America.”* derechosdigitales.org

Resource: [Publicaciones](#)

data4change (@data4change) *“We support people and organizations all over the world to harness the power of #data to forge real change and lasting impact.”* data4chan.ge

Resource: [Projects](#)

Deepmind (@DeepMind) *“We research and build safe AI systems that learn how to solve problems and advance scientific discovery for all.”* deepmind.com

Resource: [DeepMind Research](#)

Deloitte Global AI Institute *“The Global Deloitte AI Institute helps organizations connect all the different dimensions of the robust, highly dynamic and rapidly evolving AI ecosystem and leads conversations on applied AI innovation across industries, with cutting-edge insights, to promote human-machine collaboration in the “Age of With”. The AI Institute collaborates with academic research groups, start-ups, entrepreneurs, innovators, mature AI product leaders, and AI visionaries, to explore key areas of artificial intelligence including risks, policies, ethics, future of work and talent, and applied AI use cases. Combined with Deloitte’s deep knowledge and experience in artificial intelligence applications, the Institute helps make sense of this complex ecosystem, and deliver impactful perspectives to help organizations succeed by making informed AI decisions.”* deloitte.com/us/en/pages/deloitte-analytics/articles/advancing-human-ai-collaboration.html

Resources: [Trustworthy AI Framework](#), [Trustworthy and Ethical Tech Overview](#)



ORGANIZATIONS IN RESPONSIBLE TECH

DemocracyLab (@DemocracyLab) *“DemocracyLab helps tech for good projects launch by connecting skilled volunteers to projects that need them. We are open to projects from individuals, community organizations, non-profits, social purpose companies and government agencies. Our platform helps volunteers give back and develop new skills, while accelerating the evolution of new technologies that empower citizens and help institutions become more accessible, accountable, and efficient.”* [Democracylab.org](https://democracylab.org)

Resource: [Tech For Good Projects](#)

Design for Democracy (@D4DCoalition) *“D4D Coalition is an international group of democracy and human rights orgs committed to ensuring that tech embraces democracy as a core design principle.”* d4dcoalition.org

Resource: [Coalition Resources](#)

Design Justice Network (@design__justice) *“The Design Justice Network challenges the ways that design and designers can harm those who are marginalized by systems of power. We use design to imagine and build the worlds we need to live in – worlds that are safer, more just, and more sustainable. We advance practices that center those who are normally excluded from and adversely impacted by design decisions in design processes.”* [Designjustice.org](https://designjustice.org)

Resource: [Design Justice Network Principles](#)

Designing for Children’s Rights (@D4C_Guide) *“Designing for Children’s Rights is a global non-profit association, supporting the Designing for Children’s Rights Guide that integrates the U.N. rights of the child in design, business and development of products and services around the world.”* designingforchildrensrights.org

Resource: [Designing for Children’s Rights Guide \(D4CR\)](#)

Designed with Kids in Mind *“Designed with Kids in Mind is a multi-pronged campaign which includes public education, pressuring digital media companies to improve their design choices, petitions for Federal Trade Commission rulemakings, and legislative advocacy. There are a number of important bills in Congress that would achieve key elements of a design code. Please check this page for updates about this legislation and how you can help advocate for a design code!”* designedwithkidsinmind.us/

Resource: [Why We Need a Design Code](#)

Digital Agenda (@DigitalAgenda_) *“Our Tech for Good programme here shares ideas about tech for change and social impact that make the world a better place. We connect our community’s good ideas to good money. We also debate the digital downsides like wellbeing, privacy, power and future jobs.”* [Digileaders.com/topic/tech-for-good](https://digileaders.com/topic/tech-for-good)

Digital Delta (@HeadstreamInno) *“Digital Delta is a free crowdsourced research tool that identifies fundamental contributors to adolescent wellbeing in digital spaces. The tool was created based on the realization that digital landscapes weren’t designed with youth wellbeing in mind. To identify the most promising areas for improvement, we surveyed more than 800 people working to improve youth wellbeing from Headstream’s community of entrepreneurs, innovators, youth, investors, researchers, policy makers, educators and builders.”* digitaldelta.io



ORGANIZATIONS IN RESPONSIBLE TECH

The Digital Democracy Project (@Digitaldemocracy) “Our mission is to embed democratic values into the digital governance policies and statutes of nation states and the private corporations that operate the public squares of the 21st century. In service of that goal, we bring good ideas in digital democracy to light, document who’s making a difference, and help codify what’s working to achieve maximum positive public impact. We believe democracy works best when we are best informed, so we seek to educate the public, press, and lawmakers about how and where disruptive technologies strengthen societies instead of dividing them.” governing.digital

Digital Forensic Research Lab, Atlantic Council (@DFRLab, @AtlanticCouncil) “Atlantic Council’s Digital Forensic Research Lab. Cultivating a global network of digital forensic analysts (#DigitalSherlocks) to combat disinformation. Based in Washington, DC.” [Digitalsherlocks.org](https://digitalsherlocks.org)

Resource: [Reports](#)

Digital Freedom Fund (@df_fund) “The Digital Freedom Fund supports strategic litigation to advance digital rights in Europe. DFF provides financial support and seeks to catalyse collaboration between digital rights activists to enable people to exercise their human rights in digital and networked spaces.” digitalfreedomfund.org

Digital Grassroots (@digigrassroots) “Digital Grassroots is a youth and female non-profit working to increase digital citizenship on Internet governance and digital rights among youth from underrepresented communities globally. Through open leadership, community engagement programs and mentorships, we promote youth activism in shaping the Internet ecosystem.” digitalgrassroots.org

Resource: [Community Tools](#)

Digital Impact Alliance (DIAL) (@DIAL_community) “The Digital Impact Alliance (DIAL) is a “think, do, replicate” tank housed at the United Nations Foundation. Our vision is of a world where services can safely reach everyone, everywhere using the power of digital technology and data. Our mission is to overcome the systemic barriers preventing digital solutions from going to scale.” digitalimpactalliance.org

Resource: [Principles for Digital Development](#)

Digital Justice Lab (@digitaljustlab) “The Digital Justice Lab’s mission is to focus on building a more just and equitable future. We engage with diverse communities to build alternative digital futures, here in the nation we know as Canada. We work alongside technologists, community activists, and policymakers to shape a better understanding of technology and its impact on communities across the country. Through capacity building, public engagement and continuous collaboration we support communities in making informed decisions around digital issues. Digital Justice Lab is a project of Tides Canada, a registered Canadian charity dedicated to providing uncommon solutions for the common good.” digitaljusticelab.ca

Digital Life Initiative (@dlicornelltech) “We explore societal perspectives surrounding the development and application of digital technology, focusing on ethics, policy, politics, and quality of life...Embedded within the progressive teaching mission of Cornell Tech on Roosevelt Island, the Digital Life Initiative (DLI) was launched in



ORGANIZATIONS IN RESPONSIBLE TECH

2017 to analyze the societal tensions arising from existing and emergent digital technologies. Inspired by the core values of justice, democracy, privacy, responsibility, security, and freedom, we support collaborative research projects that explore ethics, policy, politics and quality of life within prevailing socio-technical systems.”
dli.tech.cornell.edu

Resource: [Active Projects](#)

Digital Services Coalition (@dscoalition) “We’re a collection of agile technology and design firms that serve—or aspire to serve—the government.”
digitalservicescoalition.org

Digital Void (@digivoidmedia) “We bring people together to explore the borderlands of digital culture, media, and technology.” digitalvoid.media

Resource: [Podcast](#)

Digital Wellness Collective (@dwforall) “We enhance human relationships through the intentional use and development of technology.” digitalwellnessinstitute.com

Resource: [Digital Wellness Day Toolkit](#)

The DISCO Network (@DISCOnetwork_) “The DISCO Network integrates critical humanistic, social science, and artistic approaches to digital studies and foregrounds questions about the cultural implications of technology to envision a new anti-racist and anti-ableist digital future.” disconetwork.org

Resource: [DISCO Network Blog](#)

Distributed AI Research Institute (@DAIRInstitute) “We are an interdisciplinary and globally distributed AI research institute rooted in the belief that AI is not inevitable, its harms are preventable, and when its production and deployment include diverse perspectives and deliberate processes it can be beneficial. Our research reflects our lived experiences and centers our communities.” Dair-institute.org

DQ Institute (@DQforAll) “The DQ Institute (DQI) is an international think-tank that is dedicated to setting global standards for digital intelligence education, outreach, and policies.” DQInstitute.org

Resources: [Collaboration Research & Design](#), [#DQEveryChild](#)

Dreaming Beyond AI “Dreaming Beyond AI is a space for critical and constructive knowledge, visionary fiction and speculative art, and community organizing around Artificial Intelligence.” dreamingbeyond.ai/en/e/pluriverse

Electronic Frontier Foundation (@EFF) “The Electronic Frontier Foundation is the leading nonprofit organization defending civil liberties in the digital world.” eff.org

Resource: [Privacy Without Monopoly: Data Protection and Interoperability](#)



ORGANIZATIONS IN RESPONSIBLE TECH

Electronic Privacy Information Center (@EPICprivacy) “EPIC focuses public attention on emerging privacy and civil liberties issues and protects privacy, freedom of expression, and democratic values in the information age.” epic.org

Resource: [Digital Library](#)

Encode Justice “Encode Justice is mobilizing communities for fairer, more ethical AI. We’re a coalition of youth activists and changemakers fighting for human rights, accountability, and justice under AI.” encodejustice.org

EqualAI (@ai_equal) “EqualAI® is a nonprofit organization, and a movement, focused on reducing unconscious bias in the development and use of artificial intelligence. Together with leaders and experts across business, technology, and government, we are developing standards and tools, as well as identifying regulatory and legislative solutions, to increase awareness and reduce bias.” equalai.org

Resource: [EqualAI Checklist](#)

Engineering Change Lab Canada (@EngChangeLab) “The Engineering Change Lab is a collaborative platform for individuals and organizations from across the engineering community to share perspectives, deepen understanding, and take action to address systemic challenges holding back the profession’s full potential.” engineeringchangelab.ca

Resources: [Technology Stewardship Principles](#), [Engineering Change Lab History](#)

ENoLL (@openlivinglabs) “The European Network of Living Labs (ENoLL) is the international, non-profit, independent association of benchmarked Living Labs.” enoll.org

Resource: [Knowledge Materials](#)

The Ethical Machine (@ShorensteinCtr) “This initiative, a project of the Shorenstein Center at the Harvard Kennedy School which was first begun when Dipayan was a Fellow at New America, the Washington-based public policy think tank, is an effort to bring some of the most impactful ideas around the development of ethical algorithms to policymakers the public.” ai.shorensteincenter.org

The Ethical Tech Project (@ethicaltechprjt) “We work with businesses, academics, and governments to build standards for the use of data in technology. We build the infrastructure for ethical technology by convening a multi-disciplinary community of experts, defining standards and a shared parlance, and advocating for broad adoption across the data supply chain.”

Resource: [Blog](#)

The Ethics and Governance of AI Initiative “Launched in 2017, the Ethics and Governance of AI Initiative is a hybrid research effort and philanthropic fund that seeks to ensure that technologies of automation and machine learning are researched, developed, and deployed in a way which vindicate social values of fairness, human autonomy, and justice.” aiethicsinitiative.org

Resource: [Projects](#)



ORGANIZATIONS IN RESPONSIBLE TECH

Ethics in Entrepreneurship “EIE’s mission is to take a stakeholder-led approach to improving ethics, culture, practices, and outcomes of emerging companies by providing them with practical knowledge, resources, and networks.”

ethicsinentrepreneurship.org

Ethics in Tech (@EthicsInTech) “At Ethics In Tech we are dedicated to crafting informative articles, starting discussions and hosting events surrounding the shifting moral compass in today’s Tech world.” ethicsintech.com

Ethicism: Conversations for Conscientious Technologists “Ethicism is an invite-only discussion group. Together, we gather monthly for conversations that spark ethical reflection, critique, and imagination. We gather because, as individuals, we accept our share of responsibility for the industry’s moral crisis. Ethicism seeks to be part of the solution by motivating reflective work, ethical design practice, and, ultimately, beneficial technology products.” ethicism.co

Resources: [The Privacy Paradox: Government Regulation and the Erosion of Technological Transparency](#), [Ethicism: A Guide for Facilitators](#)

EthicsGrade “A free resource for journalists and academics who are looking to evaluate the relative maturity of governance around AI systems at some of the world’s largest corporations and those most relevant to the AI community...EthicsGrade analysed 283 different data points of an organisation’s digital responsibility strategy and substantive governance that sits behind statements of intent such as AI principles...EthicsGrade currently cover over 300 companies and update their data quarterly. It is funded by investment managers who are looking to understand and mitigate the risks stemming from the use of AI and related technologies within their portfolio companies.” ethicsgrade.io

Resource: [Ratings Database](#)

EthicsNet “The EthicsNet team is working to empower people to infuse their personal sense of values into Artificial Intelligence, teaching it through examples, like a very young child. We want to make it easy to collect examples of behaviour, to create datasets of behavioral norms which best describe the creeds of specific demographics, as well as discovering those universal values that we all share.” ethicsnet.org

Resource: [Reading List](#)

The Engine Room (@EngnRoom) “We work to shape the ways civil society uses and thinks about technology and data, in spaces like social justice movements, digital rights advocacy and humanitarian work. We also directly support individual practitioners and organisations.” theengineroom.org

Resource: [The Engine Room Blog](#)

Equity Army (@EquityArmy) “Equity Army is a community of learners, builders, dreamers, and doers who are committed to ensuring everyone, especially historically marginalized people, feel seen, validated, and uplifted as they move through the world and utilize products and services. We work intentionally to inspire and influence equitable product development practices by centering and uplifting historically excluded communities. We are focused on revolutionizing industries by



ORGANIZATIONS IN RESPONSIBLE TECH

demonstrating the power of human-centric co-creation and collaboration, leading to powerful outcomes for everyone.” equity.army

Resource: [5 Inclusion Principles for Technology](#)

EU Disinfo Lab (@DisinfoEU) *“EU DisinfoLab is a young independent NGO focused on researching and tackling sophisticated disinformation campaigns targeting the EU, its member states, core institutions, and core values.” disinfo.eu*

Resource: [Tools to Monitor Disinformation](#)

European Digital Rights (@edri) *“EDRi is the biggest European network defending rights and freedoms online. Currently 45 non-governmental organisations are members of EDRi and dozens of observers closely contribute to our work.” edri.org*

Resources: [Advocating for better policy](#), [Decolonising digital rights](#)

Facing Facts (@FacingFactsEU) *“Facing Facts is an innovative programme aiming to tackle the issue of hate crime and hate speech in Europe. Due to increasing demand for capacity building programmes in this field by EU Member States, the Facing Facts training offer is now available online and is used by law enforcement and civil society representatives. Multiple courses in multiple languages address specific aspects of identifying, monitoring and countering hate crime and hate speech.” facingfactsonline.eu*

Resource: [Facing Facts Courses](#)

Fairlearn (@fairlearn) *“Fairlearn is an open-source, community-driven project to help data scientists improve fairness of AI systems.” fairlearn.org*

Resource: [User Guide](#)

Fairplay (@fairplayforkids) *“Fairplay’s advocacy is grounded in the overwhelming evidence that child-targeted marketing – and the excessive screen time it encourages – undermines kids’ healthy development. No other organization our size stands up for kids the way we can. Since our founding by Dr. Susan Linn in 2000, Fairplay has grown from a small group of concerned parents, health professionals, and educators into a powerful force for children and families. Our unique approach helps put kids’ well being first at home, in communities, and in corporate boardrooms.” fairplayforkids.org*

Resource: [Resources](#)

Fair Play Alliance (@FairPlayA) *“The Fair Play Alliance is a global coalition of gaming professionals and companies committed to developing quality games. We provide a forum for gaming professionals and companies to work together to develop and share best practices in encouraging healthy communities and awesome player interactions in online gaming.” fairplayalliance.org*

Resource: [Disruption and Harms in Gaming Framework](#)

Fairwork (@towardsfairwork) *“Fairwork, at its essence, is a way of imagining a different, and fairer, platform economy than the one we have today. By evaluating*



ORGANIZATIONS IN RESPONSIBLE TECH

platforms against measures of fairness, we hope to not just show what the platform economy is, but also what it can be. The Fairwork project is run out of the Oxford Internet Institute, University of Oxford, and the Berlin Social Science Center. Through our global network of researchers, we evaluate the working conditions of digital labour platforms and score them against five principles of fair work. See here for a list of collaborating institutions.”

Resource: [Fairwork Observatory](#)

Family Online Safety Institute (FOSI) (@FOSI) *“The Family Online Safety Institute is an international, non-profit organization which works to make the online world safer for kids and their families. FOSI convenes leaders in industry, government and the non-profit sectors to collaborate and innovate new solutions and policies in the field of online safety.”* fosi.org

Fight for the Future (@fightforthefttr) *“The last decade presented many new challenges and has made uncompromising, strategic organizing, like that of Fight for the Future, ever more essential. ... We’ve continued to run hard-hitting campaigns that keep runaway Big Tech in check.”* fightforthefuture.org

Resource: [Projects](#)

ForHumanity (@ForHumanity_Org) *“Hundreds of individuals, from all walks of life, have joined the ForHumanity community to advance independent Audit of AI Systems because it will build an #infrastructureoftrust in our AIs and Autonomous Systems.”* forhumanity.center

Resource: [Projects](#)

Foundation for Responsible Robotics *“The mission of the Foundation for Responsible Robotics is to shape a future of responsible robotics and artificial intelligence (AI) design, development, use, regulation, and implementation. We see both the definition of responsible robotics and the means of achieving it as ongoing tasks that will evolve alongside the technology.”* responsiblerobotics.org

Resources: [Reports](#)

Future of Humanity Institute *“FHI is a multidisciplinary research institute at the University of Oxford. Academics at FHI bring the tools of mathematics, philosophy and social sciences to bear on big-picture questions about humanity and its prospects.”* fhi.ox.ac.uk

Resource: [Publications](#)

The Future of Privacy Forum (@futureofprivacy) *“Future of Privacy Forum and the FPF Education and Innovation Foundation are non-profit organizations that serve as catalysts for privacy leadership and scholarship, advancing principled data practices in support of emerging technologies.”* fpf.org

Resource: [Best Practices](#)



ORGANIZATIONS IN RESPONSIBLE TECH

Future Says (@futuresays_) *"We are a new global initiative, committed to accountability in the tech ecosystem, to rebalancing power, and to reimagining technology in a pro-public way - built and designed by people for people."*
futuresays.org

Resource: [Reimagine Tech](#)

The Future Society (@thefuturesoc) *"The Future Society is an independent 501(c)(3) nonprofit think-and-do tank. We advance the global governance of Artificial Intelligence and other emerging technologies."* thefuturesociety.org

Resources: [The AI Initiative](#), [The Law and Society Initiative](#), [CitX](#)

Games for Change (@G4C) *"Since 2004, Games for Change has offered programs and events for people of all ages and backgrounds to explore, learn, and create at the intersection of games and social impact."* gamesforchange.org

Resources: [Initiatives](#), [G4C Learn](#), [Projects and Programs](#)

Global Brain Data Foundation *"The Foundation is a 501(c)(3) tax exempt organization established to empower human development and understanding through the ethical and (cyber)secure sharing, collaboration, and research of neurodata."*
globalbraindata.org

The Global Disinformation Index (@DisinfoIndex) *"GDI provides independent neutral and transparent data and intelligence to advise policymakers and business leaders about how to combat misinformation and its creators."*
disinformationindex.org

Resource: [Research](#)

Global Network Initiative (@theGNI) *"GNI members work together in two mutually supporting ways. The GNI Principles ("the Principles") and Implementation Guidelines provide an evolving framework for responsible company decision making in support of freedom of expression and privacy rights."* globalnetworkinitiative.org

Resources: [Annual Reports](#), [Publications](#), [Country Legal Frameworks Resource](#)

Global Partners Digital (@globalpartnersd) *"Global Partners Digital (GPD) is a social purpose company working to enable a digital environment underpinned by human rights. We do this by making policy spaces and processes more open, inclusive and transparent, and by supporting public interest actors to participate strategically in them. To realise this, we've developed an insight-led, participatory approach, centered on monitoring, analysing and shaping the legal and policy landscape relating to digital technologies."* gp-digital.org

GENIA *"GENIA promotes inclusion, foremost, in the sustainable development of artificial intelligence towards an abundant future for all. Our group aims to enhance humanity by properly training inclusive expert systems that recognize and promote autonomy and individual freedoms. We work to make sure underrepresented regions end up becoming developers of this technology, and not just users. To do this, we are first building Latin American Artificial Intelligence (AI) research & development alliances."* genia.ai



ORGANIZATIONS IN RESPONSIBLE TECH

Global Internet Forum to Counter Terrorism (@GIFCT_official) “The Global Internet Forum to Counter Terrorism (GIFCT) is an NGO designed to prevent terrorists and violent extremists from exploiting digital platforms. Founded by Facebook, Microsoft, Twitter, and YouTube in 2017, the Forum was established to foster technical collaboration among member companies, advance relevant research, and share knowledge with smaller platforms.” gifct.org

Resource: [Resource Guide](#)

Good for MEdia (@goodformedia) “#GoodforMEdia is a peer mentoring campaign for older teens and young adults to share their personal stories, insights and strategies with younger teens and tweens to support their healthy engagement with technology and social media.” [Goodformedia.org](https://goodformedia.org)

Resource: [Social Comparison Guide](#)

Goodly Labs (@GoodlyLabs) “Goodly Labs is a nonprofit organization leading research and development of prosocial technologies that develop public capacity to understand and improve society. Goodly's ready-to-scale projects empower responsible citizens to address vital democratic concerns, including misinformation, police and protester interactions, the oversight of elected officials, and deliberation/governance. Future projects will also produce tools for improving social life offline and scaffolding better interpersonal relationships at a number of scales.” goodlylabs.org

Resource: [Projects, Vision](#)

GovLab (@TheGovLab) “Deepening our understanding of how to govern more effectively and legitimately through technology.” thegovlab.org

Resource: [Projects](#)

Gradient Institute (@gradientinst) “We are an independent, nonprofit research institute that works to build ethics, accountability and transparency into AI systems: developing new algorithms, training organisations operating AI systems and providing technical guidance for AI policy development.” gradientinstitute.org

Resource: [Policy Papers](#)

Hacking//Hustling (@hackinghustling) “Hacking//Hustling is a collective of sex workers, survivors, and accomplices working at the intersection of tech and social justice to interrupt violence facilitated by technology.” hackinghustling.org

Resource: [Resources](#)

HackNY (@hackNY) “hackNY is a community of technologists aspiring to change the world. Our aim is to build a diverse and inclusive tech community to empower the next generation of responsible leaders in NYC. Since 2010, hackNY has empowered a community of student-technologists in New York City through the annual Fellows Program and student hackathons. hackNY is co-organized by faculty from NYU, Columbia, and Harvard Business School.” hackny.org

Resources: [Fellows Program](#), [Hackathon](#)



ORGANIZATIONS IN RESPONSIBLE TECH

Hack the Hood (@hackthehood) *“Hack the hood provides youth and communities of color with tech skill-building programs and career navigation support that are grounded in justice and ensure economic mobility.”* hackthehood.org

Resources: [Hustle](#), [Build](#), [Drive](#)

Harmony Labs (@harmonylabs) *“Harmony Labs builds communities and tools to reform and transform media systems. Our mission is to create a world where media systems support democratic culture and healthy, happy people. We’re organizing partners and publics to identify and gain consensus on the mechanics of media influence, and the values and design principles that underlie beneficial media. And, we’re building solid, sustainable interventions and innovations that start moving us in the direction of media that can serve the public good.”* harmonylabs.org

Resources: [Current Projects](#), [Research Network](#)

Headstream Innovations (@HeadstreamInno) *“Headstream, like its namesake, is made up of a confluence of initiatives that you all have helped bring to life in order to create a richer and more meaningful digital experience for young people as they grow up in this particularly challenging moment in time. We welcome your collaboration and hope to inspire you and your endeavor to create more inclusive, accessible and positive digital places for young people alongside us.”* headstreaminnovation.com

Resource: [Headstream Collab Lab](#)

HONR Network (@honrnetwork) *“The HONR Network is a non-profit organization focused on protecting people from online abuse.”* honrnetwork.org

Resource: [Why Hasn't Social Media Done More?](#)

humanID (Foundation for a Human Internet) (@humanID_org) *“humanID is an anonymous, bot-resistant authentication for safer online communities. Non-profit and open source, the project was started in 2018 by the Foundation for New humanID. With the help of Mozilla and Harvard, we’re on a mission to #FixTheInternet.”* human-id.org

Resource: [Blog](#)

Humanity In Tech *“Humanity in Tech is on a mission to re-humanize technology education. What started off as an idea to expand tech literacy has become an urgent endeavor to equip young people to shape the future they will lead. We are a Global Shapers project, an initiative of the World Economic Forum. The Global Shapers Community is a network of inspiring young people under the age of 30 working together to address local, regional, and global challenges.”* humanityintech.org

Humans for AI (@humans_ai) *“Focused on empowering a community of diverse, under-represented, and non-technical domain experts to participate in the future of AI.”* medium.com/humansforai

Human Technology Foundation (@humantechf) *“Human Technology Foundation created in 2012 is a foundation but also a research and action network placing the human being at the heart of technology development. For them, these technologies are*



ORGANIZATIONS IN RESPONSIBLE TECH

also part of the solutions for building a society that is more respectful of everyone. The Human Technology Foundation network has several thousand members and operates in Paris, Montreal and Geneva. Indeed, if most technologies are neither good nor bad in themselves, they are not neutral either: they carry an intentionality and a vision of the human being that must be questioned. From this perspective, the Human Technology Foundation is striving to put technology back at the heart of social debates.” human-technology-foundation.org

Hybrid Intelligence Center “Hybrid Intelligence (HI) is the combination of human and machine intelligence, expanding human intellect instead of replacing it. HI takes human expertise and intentionality into account when making meaningful decisions and performing appropriate actions, together with ethical, legal and societal values. Our goal is to design Hybrid Intelligent systems, an approach to Artificial Intelligence that puts humans at the centre, changing the course of the ongoing AI revolution.” hybrid-intelligence-centre.nl

Resources: [Collaborative, adaptive, responsible, and explainable HI](#)

Illimitable (@IllimitableOrg) “We highlight and advance the global contributions of disabled innovators in science, tech, design and entrepreneurship.” [Illimitable.org](https://illimitable.org)

Resource: [Blog](#)

The Insight Centre for Data Analytics (@insight_centre) “At Insight SFI Research Centre for Data Analytics, we undertake high impact research in data analytics that has significant benefits for the individual, industry and society by enabling better decision making.” insight-centre.org

Resource: [Publications](#)

The Institute for Ethical AI & Machine Learning (@EthicalML) “UK-based research centre that carries out highly-technical research into processes and frameworks that support the responsible development, deployment and operation of machine learning systems.” [Ethical.institute](https://ethical.institute)

Resource: [Case Study: Ethics in AI](#)

Institute for Ethics and Emerging Technologies (@IEET) “The Institute for Ethics and Emerging Technologies is a nonprofit think tank which promotes ideas about how technological progress can increase freedom, happiness, and human flourishing in democratic societies. We believe that technological progress can be a catalyst for positive human development so long as we ensure that technologies are safe and equitably distributed.” ieet.org

Resources: [Technoprogressive Policies for the 21st Century](#), [Research Programs](#)

Institute for the Future (@iftf) “Institute for the Future is the world’s leading futures education and training organization. For over 50 years, businesses, governments, and social impact organizations have depended upon IFTF global forecasts, custom research, and foresight training to navigate complex change and develop world-ready strategies.” iftf.org

Resource: [Featured Research](#)



ORGANIZATIONS IN RESPONSIBLE TECH

Institute for the Internet and the Just Society (@internetjustsoc) *“We pioneer an open platform that connects civic engagement with interdisciplinary research focused on fair artificial intelligence, inclusive digital governance and human rights law in digital spheres.”* internetjustsociety.org

Resources: [Law & Technology](#), [Digital Governance & Democracy](#)

Institute for Strategic Dialogue (@ISDglobal) *“The Institute for Strategic Dialogue (ISD) is an independent, non-profit organisation dedicated to safeguarding human rights and reversing the rising tide of polarisation, extremism and disinformation worldwide.”* isdglobal.org

Resource: [Disinformation Materials](#)

Institute of Electrical and Electronics Engineers (IEEE) (@IEEEorg) *“IEEE is the world's largest technical professional organization dedicated to advancing technology for the benefit of humanity. IEEE and its members inspire a global community through its highly cited publications, conferences, technology standards, and professional and educational activities.”* ieee.org

Resources: [Xplore Digital Library](#), [IEEE Learning Network \(ILN\)](#)

Integrity Institute (@Integrity_Inst) *“We advance the theory and practice of protecting the social internet, powered by our community of integrity professionals.”* Integrityinstitute.org

Resources: [Resources](#), [Fellows](#)

Interact *“Interact Fellows meet twice annually for a fully-sponsored retreat, joining a community of technologists from around the world. We come together to collaborate, seek out difficult conversations, and push each other towards contemplation and action.”* joininteract.com

Resources: [Fellowship](#), [Blog](#)

International Digital Accountability Council (@IDACwatchdog) *“IDAC is an independent watchdog created to improve digital accountability through international monitoring, investigation, education and collaboration with applications, platforms, law enforcement, and more.”* digitalwatchdog.org

Resource: [Investigations and Trend Reports](#)

The Internet Commission (@iNetCommission) *“We promote ethical business practice to counter hate speech, abuse, fraud, algorithmic bias, and misinformation, whilst protecting privacy and freedom of expression. Our independent evaluation, knowledge sharing, and accountability reporting services help organisations to advance digital responsibility and tackle online harms.”* inetco.org

Resource: [Accountability Report 2.0: An Independent Evaluation of Online Trust and Safety Practices](#)

Internet Freedom Foundation (@internetfreedom) *“The IFF is an Indian digital liberties organisation that seeks to ensure that technology respects fundamental rights.”*



ORGANIZATIONS IN RESPONSIBLE TECH

Our goal is to ensure that Indian citizens can use the Internet with liberties guaranteed by the Constitution.” internetfreedom.in

Resource: [Campaigns and Projects](#)

Internet Safety Labs (@SafeTechLabs) “Internet Safety Labs is an independent software product testing organization. We create safety standards and measure the safety of connected software to help organizations build safer products and services.” internetsafetylabs.org

Internet Society (@internetsociety) “The Internet Society supports and promotes the development of the Internet as a global technical infrastructure, a resource to enrich people’s lives, and a force for good in society. Our work aligns with our goals for the Internet to be open, globally connected, secure, and trustworthy. We seek collaboration with all who share these goals.” internetsociety.org

Resources: [Action Plan 2022](#), [Impact Report 2021](#)

The Internet Society Foundation (@ISOC_Foundation) “At the Internet Society Foundation, we focus on funding initiatives that strengthen the Internet in function and reach so that it can effectively serve all people. Our work advances the vision of the Internet Society (ISOC): The Internet is For Everyone. To this end, we support efforts to ensure that the Internet is open, globally-connected, secure, and trustworthy. We champion the use of the network as a critical technical infrastructure that can bring communities better education, healthcare and economic opportunity among other important areas of focus. We believe that by working together, we can use the Internet to shape a better future for us all and positively impact humanity worldwide.” isocfoundation.org

The IO Foundation (@TheIOFoundation) “The IO Foundation (TIOF) is an international nonprofit advocating on data-centric Digital Rights, focusing on the infrastructures of digital spaces.” theiofoundation.org

Resource: [Programs](#)

Israel Tech Policy Institute (@ILTechPolicy) “Tech policy leadership and scholarship, advancing ethical practices in support of emerging technologies.” techpolicy.org.il

Resources: [White Papers](#), [Infographics](#), [Filings](#)

Jain Family Institute - Digital Ethics and Governance (@jainfamilyinst) “We conduct research particularly on the ethical and social implications of automated decision-making systems. We bridge the knowledge gap between academics, law professionals, policymakers, and engineers through interdisciplinary workshops, pedagogical initiatives, and guidance for organizations who seek to use artificial intelligence responsibly.” jainfamilyinstitute.org

Resource: [Special Projects](#)

Just Tech Fellowship (@ssrc_org, @ssrc_just_tech) “The Just Tech Fellowship supports and mobilizes diverse and cross-sector cohorts of researchers and practitioners to imagine and create more just, equitable, and representative technological futures. Fellows will identify and challenge injustices emerging from new



ORGANIZATIONS IN RESPONSIBLE TECH

technologies, and identify solutions that advance social, political, and economic rights. Fellows receive two-year awards of \$100,000 per year, robust supplementary funding packages to subsidize additional expenses, and seed funding to work on collaborative projects with other Just Tech Fellows. The fellowship will provide the space and time necessary for deep reflection, as well as an engaged community and opportunities to facilitate ambitious co-creation.” ssrc.org/programs/just-tech/just-tech-fellowship

Lincoln Policy (@JoinLincoln) “Lincoln Network...bridg[es] the gap between the two cultures of tech and policy, and act[s] as a translation layer and network builder between these different communities. Our unique advantage is that we combine policy expertise with hard-earned business and technology acumen, giving us a deeper level of insight into policy debates.” lincolnpolicy.org

Resources: [Publications](#), [Innovation Policy Fellows](#), [Podcasts](#)

LGBT Technology Partnership & Institute (@LGBTTech) “LGBT Tech is a diverse team of experts from multiple backgrounds that belong to the LGBTQIA+ community. Grounded in empirical research, we develop programs and resources that support LGBTQ+ communities and work to educate organizations and policy makers on the unique needs LGBTQ+ individuals face when it comes to tech.” [Lgbttech.org](https://lgbttech.org)

Resources: [Affordable Connectivity Program](#), [Online Safety](#), [Local Community Resources](#)

Logic Magazine (@logic_magazine) “Logic is a small magazine devoted to deepening the discourse around technology. We publish three times per year in print and digital formats.” logicmag.io

Lumen Database (@lumendatabase) “The Lumen database collects and analyzes legal complaints and requests for removal of online materials, helping Internet users to know their rights and understand the law. These data enable us to study the prevalence of legal threats and let Internet users see the source of content removals.” lumendatabase.org

Resource: [Lumen Database](#)

Machine Intelligence Research Institute (@MIRIBerkeley) “The Machine Intelligence Research Institute exists to ensure that the creation of smarter-than-human intelligence has a positive impact.” intelligence.org

MediaJustice (@mediajustice) “MediaJustice is dedicated to building a grassroots movement for a more just and participatory media—fighting for racial, economic, and gender justice in a digital age. MediaJustice boldly advances communication rights, access, and power for communities harmed by persistent dehumanization, discrimination and disadvantage. Home of the #MediaJusticeNetwork, we envision a future where everyone is connected, represented, and free.” Mediajustice.org

Resources: [Communications Strategy](#), [Media Justice and Technology](#), [Arts and Culture](#), [Movement Building](#)

Meedan (@meedan) “Meedan is a global technology not-for-profit that builds software and programmatic initiatives to strengthen journalism, digital literacy, and accessibility



ORGANIZATIONS IN RESPONSIBLE TECH

of information online and off. We develop open-source tools for creating and sharing context on digital media through annotation, verification, archival, and translation.” meedan.com

Resource: [Content Moderation Toolkit](#)

The Montreal AI Ethics Institute (@mtlaiethics) *“The Montreal AI Ethics Institute is an international non-profit organization democratizing AI ethics literacy. We equip citizens concerned about artificial intelligence to take action because we believe that civic competence is the foundation of change.”* Montrealetics.ai

Resources: [Publications](#), [Learning Community](#), [AI Ethics Living Dictionary](#)

The Mozilla Foundation (@mozilla) *“The Mozilla Foundation works to ensure the internet remains a public resource that is open and accessible to us all. Mozilla invests in bold ideas, global leaders, and the convening and campaign power of people. For more than two decades, we’ve worked across borders, disciplines, and technologies to fuel a movement to realize the full potential of the internet.”* Foundation.mozilla.org

Resources: [When Content Moderation Hurts](#), [Blog](#)

My Digital TAT2 (@MyDigitalTat2) *“Founded by a child psychologist and social worker, My Digital TAT2 addresses how to build healthy habits, critical thinking, and thoughtful online behavior in order to integrate technology into our lives in a constructive way.”* mydigitaltat2.org

Resource: [Resources - My Digital Tat2](#)

The National Association for Media Literacy Education (NAMLE) (@MediaLiteracyEd) *“We’re the leading nonprofit membership organization dedicated to advancing media literacy education in the United States.”* Namele.net

Resources: [Resources](#), [Journal of Media Literacy Education](#)

The Net Safety Collaborative *“Through NetFamilyNews.org, SocialMediaHelpline.com and participation in the international public discourse about our new, very social media environment, The Net Safety Collaborative provides insights into research, trends and developments that surface ways stakeholders are helping it serve humanity better.”* Netfamilynews.org

Resource: socialmediahelpline.com

New America’s Public Interest Technology (@NewAmericaPIT) *“New America’s Public Interest Tech program works with communities to design, build, and implement better public services and policies via innovative strategies.”* newamerica.org/pit

Resources: [Publications](#), [Events](#)

New_Public (@WeAreNew_Public) *“New_Public is a place for thinkers, builders, designers and technologists like you to meet and share inspiration.”* newpublic.org

Resource: [Building Better Digital Spaces](#)



ORGANIZATIONS IN RESPONSIBLE TECH

Nesta (@nesta_uk) *"We are Nesta, the UK's innovation agency for social good. We design, test and scale new solutions to society's biggest problems."* [Nesta.org.uk](https://www.nesta.org.uk)

Resources: [Discovery Hub](#), [Mission Studio](#), [Impact Investments](#)

The News Literacy Project (@NewsLitProject) *"The News Literacy Project, a nonpartisan national education nonprofit, provides programs and resources for educators and the public to teach, learn and share the abilities needed to be smart, active consumers of news and information and equal and engaged participants in a democracy."* [newslit.org](https://www.newslit.org)

Resource: [The News Literacy Project resources Hub](#)

OASIS Consortium (@ConsortiumOasis) *"An association of key stakeholders across digital platforms, media, government, and academia focused on brand and user safety. This includes advocating for brand and user safety, focusing on actionable terms and standards of behavior, and steering the industry toward clarity and responsibility."* [Oasisconsortium.com](https://www.oasisconsortium.com)

Resource: [Brand Safety Exchange Podcast](#)

OdiselA (@odise_ia) *"OdiselA is a non-profit space for thought, debate and action formed, in November 2019, by companies, universities, institutions and individuals who jointly ensure the proper use of artificial intelligence"* [odiseia.org](https://www.odiseia.org)

Resources: [Ethics and Responsibility](#), [Technological Surveillance](#)

OECD AI Policy Observatory (@OECDInnovation) *"The OECD.AI Policy Observatory combines resources from across the OECD, its partners from all stakeholders groups. It facilitates dialogue and provides multidisciplinary, evidence-based policy analysis and data on AI's areas of impact."* [Oecd.ai](https://www.oecd.ai)

Resource: [Trends and Data](#)

One in Tech (@WeAreOneInTech) *"One in Tech removes barriers to ensure untapped individuals receive equitable access to begin and advance their career within the Cybersecurity and IT Audit professions."* [Oneintech.org](https://www.oneintech.org)

Resource: [Three Key Programmes](#)

Online Hate Prevention Institute (@OnlineHate) *"The Online Hate Prevention Institute (OHPI) is an Australian Harm Prevention Charity. We aim to reduce the risk of suicide, self harm, substance abuse, physical abuse and emotional abuse that can result from online hate...OHPI conducts research, runs campaigns and provides public education, recommends policy changes and law reform, and seeks ways of changing online systems to make them more effective in reducing the risks posed by online hate."* [Ohpi.org.au](https://www.ohpi.org.au)

Resources: [How to Guides](#), [Measuring the Hate: The State of Antisemitism in Social Media](#)

Online Safety Tech Industry Alliance (@ostia_uk) *"The UK's membership body for the online safety tech industry."* [Ostia.org.uk](https://www.ostia.org.uk)



ORGANIZATIONS IN RESPONSIBLE TECH

OnlineSOS (@onlinesosorg) *“Online SOS is a safe place where people can find tools, information and, above all, empowerment, in the face of online harassment.”*

[Onlinesos.org](https://onlinesos.org)

Resources: [Assess and Take Action: Identify what type of online harassment you’re experiencing- and take action](#)

Open Knowledge House (@OKFN) *“Our mission is to create a more open world – a world where all non-personal information is open, free for everyone to use, build on and share; and creators and innovators are fairly recognised and rewarded.”* okfn.org

Resource: [OKFN Blog](#)

Open Media (@openmediaorg) *“OpenMedia works to keep the Internet open, affordable, and surveillance-free. We create community-driven campaigns to engage, educate, and empower people to safeguard the Internet.”* [Openmedia.org](https://openmedia.org)

OpenMined (@openminedorg) *“OpenMined is an open-source community whose goal is to make the world more privacy-preserving by lowering the barrier-to-entry to private AI.”* openmined.org

Open Source Researchers of Color (@osroccollective) *“We are a radical and ethical collective of investigators who research and preserve crowd-sourced information. We create resources on security, privacy, investigating, and archiving social movements.”* [Osroc.org](https://osroc.org)

Resource: [Related resources](#)

Open Tech Institute (@OTI) *“OTI works at the intersection of technology and policy to ensure that every community has equitable access to digital technology and its benefits. We promote universal access to communications technologies that are both open and secure, using a multidisciplinary approach that brings together advocates, researchers, organizers, and innovators.”* [Newamerica.org/oti](https://newamerica.org/oti)

Resources: [Publications](#), [Events](#)

OpenAI (@OpenAI) *“OpenAI is an AI research and deployment company dedicated to ensuring that general-purpose artificial intelligence benefits all of humanity.”*

[OpenAI.com](https://openai.com)

Resource: [Research](#)

The Open Data Institute (The ODI) (@ODIHQ) *“The ODI is a non-profit with a mission to work with companies and governments to build an open, trustworthy data ecosystem. We work with a range of organisations, governments, public bodies and civil society to create a world where data works for everyone.”* [Theodi.org](https://theodi.org)

Resources: [Projects](#), [Research](#)

Partnership for Public Service (@publicservice) *“We are a nonprofit, nonpartisan organization that is building a better government and a stronger democracy.”*

[Ourpublicservice.org](https://ourpublicservice.org)



ORGANIZATIONS IN RESPONSIBLE TECH

Partnership on AI (@PartnershipAI) “Partnership on AI (PAI) is a non-profit partnership of academic, civil society, industry, and media organizations creating solutions so that AI advances positive outcomes for people and society. By convening diverse, international stakeholders, we seek to pool collective wisdom to make change.” Partnershiponai.org

Resource: [Programs](#)

Partnership on Employment & Accessible Technology (PEAT) (@PEATWorks) “We foster digital accessibility in the workplace and a vision for “Why” and “How” to create accessible emerging technologies. Our mission is to foster collaborations in the technology space that build inclusive workplaces for people with disabilities. Our vision is a future where new and emerging technologies are accessible to the workforce by design.” PEATworks.org

Resource: [Digital Accessibility Toolkit](#)

People-Centered Internet (@PCI_Initiative) “People-Centered Internet (PCI) is a 501(c)3 nonprofit organization working to ensure that the Internet is a positive force for good, improving the lives and well-being of people around the world. This includes promoting connectivity, fighting disinformation, contributing to the discussion about technology ethics, supporting the development of people-centered applications and initiatives, advising policymakers, and leveraging technology to help communities be more resilient.” Peoplecentered.net

Resource: [Policy & Governance](#)

People of Color in Tech (@pocintech) “POCIT is the world’s leading platform for people of color in tech to share, grow, and get hired.” peopleofcolorintech.com

Resources: [Articles](#), [Podcast](#)

Pew Research Center: Internet & Technology (@pewinternet) “Nonpartisan, non-advocacy [Pew Research] data about technology and the internet.” Pewresearch.org/internet

Resource: [The Role of Social Media in News](#)

The Population Health Information Research Infrastructure (PHIRI) Project (@PHIRI4EU) “PHIRI is the roll-out of the Distributed Infrastructure on Population Health (DIPoH) which aims to generate the best available evidence for research on health and well-being of populations as impacted by COVID-19.” Phiri.eu

Resource: [Related Projects and Initiatives](#)

Pollicy (@PollicyOrg) “Pollicy functions at the intersection of data, technology and design to improve government service delivery.” Based in Uganda. Pollicy.org

Resources: [Projects](#), [Toolkit](#), [Reports](#), [Webinars](#)

PIT Policy Lab (@PitPolicy) “We enable cross-sector collaborations towards an understanding of Public Interest Technology through practical research, policy insights,



ORGANIZATIONS IN RESPONSIBLE TECH

*and the drafting of proofs of concept in the field.” Based in Mexico City, Mexico.
Policylab.tech*

Resources: [Publications](#), [Videos](#)

Pivot For Humanity (@Pivot4Humanity) *“Pivot for Humanity is working to professionalize the social tech industry, creating a more responsible, ethical and accountable internet.”* Pivotforhumanity.com

Resources: [A Way Forward](#)

Policy Monks (@PolicyMonks) *“Policy Monks is a public policy research and advocacy organisation working at the intersection of technology, policy and development.”*
Based in New Delhi, India. Policymonks.com

Resources: [Policy Briefs](#), [Reports](#)

Presidential Innovation Fellows (@PIFgov) (Part of Technology Transformation Services & U.S. General Services Administration) *“The Presidential Innovation Fellows (PIF) program pairs talented, diverse technologists and innovators with top federal change-makers to catalyze a modern government for all.”*
Presidentialinnovationfellows.gov

Resource: [Project](#)

Privacy International (@privacyint) *“PI exists to protect people’s privacy, dignity and freedoms from abuses of companies and governments.”* Based in London, UK.
Privacyinternational.org

Resource: [Advertisers on Facebook: Who the heck are you and how did you get my data?](#)

Prosocial Design Network (@DesignProsocial) *“We curate and research evidence-based design solutions to bring out the best in human nature online.”*
Prosocialdesign.org

Resources: [Case studies](#), [Research Compendium](#)

Project Unicorn (@projunicorn) *“Project Unicorn is an effort to improve data interoperability within K-12 education. We aim to create a community of innovators who make the broader case for secure interoperability by determining shared priorities, working in partnership with school systems and vendors to understand its importance and benefits, creating a demand side push for interoperability through partnerships, and educating buyers to consider the total cost of ownership through informed comparison of vendors.”* Projectunicorn.org

Public Data Lab (@PublicDataLab) *“The Public Data Lab is an interdisciplinary network exploring what difference the digital makes in attending to public problems. We develop materials and formats for collective inquiry with and about digital data, digital methods and digital infrastructures.”* PublicDataLab.org

Resource: [Field Guide to Fake News](#)



ORGANIZATIONS IN RESPONSIBLE TECH

Public Knowledge (@publicknowledge) *“Public Knowledge promotes freedom of expression, an open internet, and access to affordable communications tools and creative works. We work to shape policy on behalf of the public interest...Public Knowledge works at the intersection of copyright, telecommunications, and internet law, at a time when these fields are converging.”* [Publicknowledge.org](https://publicknowledge.org)

Resources: [Public Interest Advocacy Training](#), [Content Moderation](#)

The Public Voice (@thepublicvoice) *“The Public Voice coalition was established in 1996 to promote public participation in decisions concerning the future of the Internet. The Public Voice has pursued issues ranging from privacy and freedom of expression to consumer protection and Internet governance.”* [Thepublicvoice.org](https://thepublicvoice.org)

Resource: [Issues & Resources](#)

Queer in AI (@QueerInAI) *“Queer in AI was established by queer scientists in AI with the mission to make the AI community a safe and inclusive place that welcomes, supports, and values LGBTQIA2S+ people. We work towards this aim by building a visible community of queer AI scientists through conference workshops, social meetups, conference poster sessions, mentoring programs, graduate application financial aid, and many other initiatives.”* [Queerinaai.com](https://queerinaai.com)

Resource: [How to Make Virtual Conferences Queer-Friendly: A Guide](#)

Ranking Digital Rights (@rankingrights) *“Evaluating the world's most powerful digital platforms and telecommunications companies on their commitments to #digitalrights.”* RankingDigitalRights.org

Resources: [Recommendations for governments and policymakers](#), [2020 RDR Corporate Accountability Index](#)

Rathenau Institute (@RathenauNL) *“Research and dialogue relating to the societal aspects of science, innovation and technology.”* rathenau.nl/en

Resource: [Dossier of Reports](#)

Research ICT Africa (@RIAnetwork) *“Research ICT Africa (RIA) conducts multidisciplinary research on digital governance, policy and regulation that facilitates evidence-based and informed policy making for improved access, use and application of digital technologies for social and economic development in Africa.”* Researchictafrica.net

Resources: [Current Projects](#), [Research and Publications](#), [Policy Briefs](#), [Presentations](#), [Submissions to governments/multilateral agencies](#), [Work Opportunities](#)

Responsible AI Institute (RAI) (@ResponsibleAI) *“RAI is a non-profit organization building tangible governance tools for trustworthy, safe and fair Artificial Intelligence (AI).”* Responsible.ai

Resources: [Responsible AI White Paper](#), [RAI Certification Guidebook](#)



ORGANIZATIONS IN RESPONSIBLE TECH

Responsible Innovation Labs (@ResponsibleLabs) "Responsible Innovation Labs' mission is to create standards of innovation to serve the needs of a global society, and build enduring companies that re-center technology as a force for good. With innovation comes responsibility – to generate returns beyond profits and to make technology a force for good in the world. Companies can no longer be engineered solely for growth. They must embrace the right constraints, transparency and framework to engineer for growth and good." rilabs.org

Resource: [Blog](#)

Responsible Tech Hub "Responsible Technology Hub (RTH) is committed to decisively shaping the emerging technologies of the present and near future. Our mission is to foster an intergenerational exchange that elevates the voices of young people and allows representatives from industry, academia, policy, and the general public to connect and co-create a responsible technological future. We believe that the development of responsible technology is not a given. We must be reflective and committed to shaping it in the most ethical way possible. In our work we want to educate and formulate our own vision of responsible tech. Our aim is to demystify the debate around tech responsibility and build an inclusive space for intergenerational and cross-sectoral co-creation to inspire a new generation of developers and leaders." responsibletechhub.com

The Rights Observatory (@observatoryihr) "The Rights Observatory protects citizens rights in a digital world."

The Rise of Privacy Tech (@PrivacyTechRise) "The Rise of Privacy Tech is an initiative to bring together privacy tech founders, investors, experts, and advocates. Together, we fuel the rise of privacy innovation". riseofprivacytech.com

Resource: [Resources](#)

Safer Internet Day (@SaferInternetDay) "Starting as an initiative of the EU SafeBorders project in 2004 and taken up by the Insafe network as one of its earliest actions in 2005, Safer Internet Day has grown beyond its traditional geographic zone and is now celebrated in approximately 170 countries worldwide...From cyberbullying to social networking to digital identity, each year Safer Internet Day aims to raise awareness of emerging online issues and current concerns." saferinternetday.org

Resource: [Gallery of resources](#)

Safety Tech Innovation Network (@SafetyTechUK) "A network dedicated to the promotion, collaboration and the industrial application of technologies supporting online safety." safetytechnetwork.org.uk

Resources: [Upcoming Events](#), [Podcast](#), [Articles](#)

SafeToNet Foundation (@SafeToNet_FDN) "Our Charitable Objects are the advancement of the protection of the public, particularly children and young people, from harm arising from contact with unsuitable material on the Internet or similar media, promoting the welfare of those affected by it, promoting education and awareness of e-safety and online social issues." safetonetfoundation.org

Resources: [Advice & Guidance](#), [Blog](#)



ORGANIZATIONS IN RESPONSIBLE TECH

School of Data (@SchoolOfData) "We are a network of individuals and organizations working on empowering civil society organizations, journalists and citizens with skills they need to use data effectively." schoolofdata.org

Resource: [Programs](#)

SeedAI (@SeedAIOrg) "We meet people where they are to enable the next wave of transformative technology by a representative, new, diverse generation of the AI workforce." seedai.org

Resource: [Featured Perspectives](#)

The Signals Network (@TheSignalsNetw) "Nonprofit. Supporting whistleblowers. Coordinating international media investigations. Building transparent societies and stronger democracies." thesignalsnetwork.org

Resources: [Tech Worker's Handbook](#), [Tech Accountability Project](#)

Software.org: the BSA Foundation (@BSA_Foundation) "We are a global research org helping explain #software's impact on our lives, economy & society + enabling technologies, the workforce of the future & #STEM" software.org

Resource: [Reports](#)

Soliya (@Soliya) "Soliya is an international, not-for-profit organization, pioneering the field of Virtual Exchange, seamlessly integrating technology and global education for public diplomacy. We combine the power of interactive technology with the science of dialogue to offer proven cross-cultural exchanges, and empower new generations with social and emotional skills to thrive in digital spaces and build a more human-centered future." soliya.net

Resource: [Global Circles Program](#)

The Teaching Responsible Computing Community "A curated and supported global community working towards integrating social responsibility and ethics into computing curricula, with a focus on teaching methods. This community of practice has a specific focus on pedagogy and teaching, with the aim to support a cross disciplinary group of people. The community includes disciplines outside of computing that are critical for computing. The aim is to support cross-disciplinary practitioners and faculty, along with academics, industry practitioners, Computer Science education researchers, and teaching and learning experts in their work. The community includes teaching teams across colleges and universities who are part of the Responsible Computer Science Challenge which is funded by Omidyar Network, Mozilla, Schmidt Futures, and Craig Newmark Philanthropies. It also includes those working broadly with computing, social responsibility, and ethics curricula, along with the 30+ collaborators on the Teaching Responsible Computing Playbook. The community of practice offers opportunities for collaboration, peer learning exchange, and periodic presentations and events." ResponsibleCS.org

Resource: [Classroom Materials](#)



ORGANIZATIONS IN RESPONSIBLE TECH

Tech Against Terrorism (@techvsterrorism) *"an initiative launched and supported by the United Nations Counter Terrorism Executive Directorate (UN CTED) working with the global tech industry to tackle terrorist use of the internet whilst respecting human rights."* techagainstterrorism.org

Resources: [Research](#), [Podcast](#)

TechCabal (@techcabal) *A pan-African publication chronicling innovation and technology developments across the continent"* techcabal.com

Tech Coalition (@tech_coalition) *"The Tech Coalition is a global alliance of technology companies of varying sizes and sectors that work together to drive critical advances in technology and adoption of best practices for keeping children safe online. We convene and align the global tech industry, pool their knowledge and expertise, to help our members better prevent, detect, report, and remove online child sexual abuse content."* technologycoalition.org

Resource: [Reports](#)

TechCongress (@congressfellows) *"We place computer scientists, engineers, and other technologists to serve as technology policy advisors to Members of Congress through the Congressional Innovation Fellowship, the Congressional Innovation Scholars program, and the Congressional Digital Service Fellowship. We bridge the divide of knowledge and experience between DC and Silicon Valley for better outcomes for both."* techcongress.io

Resources: [Policy Opportunities for Technologists](#), [Events](#), [Podcast](#), [Policy Opportunities](#)

TechEquity Collaborative (@TECollab) *"We envision a world where the growth of the tech industry creates economic prosperity for everyone, and where tech sector employees and companies are engaged and active participants in making our economy equitable. Our mission is to mobilize tech workers and companies to advance structural change that addresses economic inequity at its roots."* techequitycollaborative.org

Resources: [Tech, Bias, and Housing Initiative](#), [System Reset Report](#), [Contract Worker Disparity Project](#)

TechFreedom (@techfreedom) *"is a non-profit, non-partisan technology policy think tank. We work to chart a path forward for policymakers towards a bright future where technology enhances freedom, and freedom enhances technology."* Techfreedom.org

Resource: [White Papers](#)

Tech Point Africa (@techpointdotng) *"Keeping you up to date on the evolution of technology in Africa."* techpoint.africa

Tech Policy Press (@TechPolicyPress) *"The goal for Tech Policy press is to provoke new ideas, debate and discussion at the intersection of technology, democracy and policy. We invite you to submit essays, opinion, reporting and other forms of content for consideration."* techpolicy.press

Resources: [Podcast](#), [New Voices](#)



ORGANIZATIONS IN RESPONSIBLE TECH

Tech Stewardship Network (@TechStewardship) “A platform for those involved in the creation and supplication of technology to refine and imagine new ways to shape technology for the benefit of all. Tech Stewardship is a professional identity, orientation and practice.” techstewardship.com

Resource: [Stories, Insights, and Resources](#)

TechShift (@TechshiftA) “Founded in 2017, TechShift supports student organizations leading initiatives at the intersection of technology and social impact by providing mentoring, resources, and funding made possible by our alliance of 30 member organizations across 3 continents.” techshift.org

Resources: [Microgrants](#), [Mentorship](#), [Stem For Good - Social Toolkit](#)

The Tech Talent Project (@TechTalentProj) “The Tech Talent Project is a nonpartisan, nonprofit organization dedicated to increasing the ability of the U.S. government to achieve critical economic, policy, and human outcomes. We are working to reach these outcomes by identifying federal technology leadership positions critical to a 21st century government and building a pool of highly qualified technical leaders.” techtalentproject.org

Tech Transparency Project (@TTP_updates) “TTP is an information and research hub for journalists, academics, policymakers and members of the public interested in exploring the influence of the major technology platforms on politics, policy, and our lives.” techtransparencyproject.org

Resources: [Reports](#), [Data](#)

TechWomen (@TechWomen) “A program of @ECAatState & administered by @IIEglobal, empowering women leaders in #STEM from Africa, Central and South Asia, and the Middle East.” techwomen.org

Resources: [Award Application](#), [Mentor Application](#)

Tech2025 (@JoinTech2025) “Tech 2025 is a platform and innovation community for learning about, and discussing, the most consequential emerging technologies that will impact our world in the next 5 years including AI, Machine Learning, VR/AR/MR, Driverless Vehicles, Robot Automation, 3D Printing, Space Tech, Drones, Internet of Things, Blockchain, and Sustainable Technologies.” tech2025.com

Resources: [Online courses](#), [Blog](#), [Podcast](#)

Thorn (@thorn) “[A]n international anti-human trafficking organization that works to address the sexual exploitation of children. The primary programming efforts of the organization focus on Internet technology and the role it plays in facilitating child pornography and sexual slavery of children on a global scale.” thorn.org

Resources: [Sound Practices Guide Download](#), [blog](#)

Tony Blair Institute for Global Change (@instituteGC) “We’re working to reinvigorate the centre ground of politics, reframing debates and providing solutions to issues from extremism to the challenges presented by the technological revolution.” institute.global



ORGANIZATIONS IN RESPONSIBLE TECH

Resource: [Technology and Digitalisation](#)

TransTech Social Enterprises (@TransTechSocial) “TransTech Social Enterprises is a nonprofit organization that aims to empower, educate and employ LGBTQ people through the use of technology. TransTech focuses its efforts in the trans community where rates of violence, harassment, discrimination that are considerably disproportionate to the greater population.” transtechsocial.org

Resource: [Training](#)

Trust & Safety Professional Association; Trust & Safety Foundation (@tspainfo) (@TandSFoundation) “The Trust and Safety Professional Association (TSPA) and the Trust & Safety Foundation (TSF) are non-profit sibling organizations dedicated to improving the global practice and understanding of trust and safety online. TSPA is a membership association that advances the trust and safety profession through a shared community of practice, helping trust and safety professionals find community wherever they are. TSF is focused on improving society’s understanding of the trust and safety field through educational and research programs and interdisciplinary dialogue.” tspa.info

Resources: [Trust & Safety Curriculum](#), [TSF Case Studies](#)

Trust Lab (@trustlab_) “Trust Lab was founded by senior Trust & Safety executives from Google, YouTube, Reddit and TikTok with over 30 years of industry experience and a mission to make the web safer for everyone.” trustlab.com

Resources: [Trusted Identity](#), [Trusted Content](#)

UK Safer Internet Centre (@UK_SIC) “Helping children and young people stay safe online.” Saferinternet.org.uk

Resources: [Parents & Carers](#), [Teachers](#), [Young People](#), [Grandparents](#), [Governors and Trustees](#)

Unfinished (@byunfinished) “Unfinished works to strengthen our civic life in the digital age. With a network of partners in technology, academia, social impact and the arts, Unfinished is imagining the future of technology, culture, and governance to create a thriving multiracial democracy and just economy. To achieve this, Unfinished is advancing a very concrete solution through [Project Liberty](#), an initiative with the potential to transform how the internet works and who benefits from the digital economy. Project Liberty aims to create a new civic architecture for the next generation of the internet that prioritizes people over platforms, returns the ownership and control of personal data to individuals, reflects a commitment to ethics and shared values, and expands economic opportunities for both users and developers. unfinished.com

Resources: [Unfinished Live](#), [Unfinished Labs](#)

UNOCHA Centre for Humanitarian Data (@humdata) “The Centre for Humanitarian Data is focused on increasing the use and impact of data in the humanitarian sector. It is managed by the United Nations Office for the Coordination of Humanitarian Affairs (OCHA). The Centre’s services are available to humanitarian partners and OCHA staff in the field and at Headquarters free of charge.” Centre.humdata.org



ORGANIZATIONS IN RESPONSIBLE TECH

Resource: [Resource Library](#)

Upturn (@TeamUpturn) *“Upturn advances equity and justice in the design, governance, and use of technology. We believe technology should advance justice, not amplify racial and economic inequities.”* [Upturn.org](#)

U.S. Digital Corps (@USDigitalCorps) *“The U.S. Digital Corps is a new two-year fellowship for early-career technologists to work on critical impact projects including coronavirus response, economic recovery, cybersecurity, and racial equity in the federal government.”* [digitalcorps.gsa.gov](#)

Resource: [U.S. Digital Corps Fellowship](#)

US of Tech / United States of Technologists *“The USofTech is a collective effort to bring a diverse group of 10,000 technologists into the public sector across state, local, and federal government.”* [usoftech.org](#)

Resource: [Resources](#)

Waag (@waag) *“Waag operates at the intersection of science, technology and the arts, focusing on technology as an instrument of social change, guided by the values of fairness, openness and inclusivity.”* [waag.org/en](#)

Resource: [Publications](#)

WashingTech (@WashingTECH) *“The Washington Center for Technology Policy Inclusion. We're America's voice for civil rights & inclusion in #tech law & public policy.”* [Washingtech.com](#)

Resources: [What Is Technology Policy?](#), [Publications and Resources](#), [Blog](#), [Podcast](#)

We and AI (@WeAndAI) *“UK non-profit organisation activating diverse communities to make AI work for everyone. Programmes include AI and Society course, AI Community Champion Programme, Race and AI Toolkit, AI Stakeholder workshops, also part of Better Images of AI. Encouraging better questioning of AI and signposting different ways to get involved in shaping AI. Collaborative volunteer organisation inviting volunteers from all backgrounds and roles.”* [weandai.org](#)

Resource: [Resources](#)

The Web Foundation (@WebFoundation) *“The World Wide Web Foundation was established in 2009 by web inventor Sir Tim Berners-Lee and Rosemary Leith to advance the open web as a public good and a basic right. We are an independent, international organisation fighting for digital equality – a world where everyone can access the web and use it to improve their lives.”* [webfoundation.org](#)

Resources: [Tackling Online Gender-Based Violence and Abuse](#), [History of the Web](#), [Publications](#)

WITNESS (@witnessorg) *“WITNESS helps people use video and technology to protect and defend human rights. WITNESS trains & supports people using video in their fight for human rights, exposing the truth, one video at a time.”* [witness.org](#)



ORGANIZATIONS IN RESPONSIBLE TECH

Resource: [Resource Library](#)

Women in AI (@women_in_ai) “Women in AI (WAI) is a nonprofit do-tank working towards gender-inclusive AI that benefits global society. Our mission is to increase female representation and participation in AI. We are a community-driven initiative bringing empowerment, knowledge and active collaboration via education, research, events, and blogging.” womeninai.co

Resources: [Education Opportunities](#), [Blog](#)

Women in AI Ethics (@Women_AI_Ethics) “WAIE mission is to recognize, encourage, and empower diverse voices of women working on the ethics of AI and related disciplines such as algorithmic bias, privacy, sustainability, etc.” lighthouse3.com/womeninaiethics

Resource: [Women in Ethics Summit](#)

Women in Machine Learning (@WiMLworkshop) “Women in Machine Learning organization. Maintains a list of women in ML. Profiles the research of women in ML. Annual workshop and other events.” wimlworkshop.org

Resources: [Opportunities, Tools and Tips](#), [Mailing List](#), [Directory of Women in Machine Learning](#), [Profiles of Women in Machine Learning](#)

Women in Security & Privacy (WISP) (@wisporg) “Women In Security and Privacy (WISP) – Advancing women to lead the future of security & privacy.” wisporg.com

Resources: [Publish with WISP](#), [Blog](#)

World Economic Forum’s Centre for the Fourth Revolution (@WEF) “How can we maximize the benefits of science and technology for society? That’s our mission. To achieve it, we’ve created a global network of expertise, collaboration and impact based in San Francisco, with centres in 13 countries. We partner with governments, leading companies, civil society, and experts from around the world to co-design and pilot innovative new approaches to policy and governance in the Fourth Industrial Revolution.” Weforum.org/centre-for-the-fourth-industrial-revolution

Resource: [Policy Frameworks and Governance Protocols](#)

World Economic Forum G20 Global Smart Cities Alliance (@WEF) “The G20 Global Smart Cities Alliance on Technology Governance unites municipal, regional and national governments, private-sector partners and cities’ residents around a shared set of principles for the responsible and ethical use of smart city technologies. The Alliance establishes and advances global policy standards to help accelerate best practices, mitigate potential risks, and foster greater openness and public trust.” <https://globalsmartcitiesalliance.org>

Resource: [Policy Roadmap](#)

World Ethical Data Foundation (@WEDF_foundation) “We explore the full range of questions about the use and future of data – from AI, analytics & privacy to press freedoms & political process.” Worldethicaldata.org

ORGANIZATIONS IN RESPONSIBLE TECH

Resource: [Media](#)

World Health Organization, Pandemic and Epidemic Intelligence Hub (@WHO)
“The WHO Hub for Pandemic and Epidemic Intelligence will support countries, regional and global actors to address future pandemic and epidemic risks with better access to data, better analytical capacities, and better tools and insights for decision making.”
[Pandemichub.who.int/pandemic-hub/](https://pandemichub.who.int/pandemic-hub/)

Resources: [Strategy Paper](#), [EPI-BRAIN](#)

XR Association (@XRAssociation) *“XRA promotes responsible development and adoption of virtual, augmented and mixed reality.”* xra.org

Resources: [XR Primer 2.0: A Starter Guide for Developers](#), [Policy Statements on Privacy, Age Appropriate Use, white paper on 2022 CHIPS and Science Act](#), [White Paper on Immersive Tech and Infrastructure](#)

XR Safety Initiative (@XRSI.org) *“Helping build safe virtual environments. XR Safety Initiative (XRSI) is a 501(c)(3) worldwide not-for-profit charitable organization focused on promoting privacy, security, ethics in the XR domain.”* xrsi.org

Resources: [Research and Standards](#), [Taxonomy](#)

Youth Internet Governance Forum (@globalyouthigf) *“Youth IGF is an alliance of young people interested in Internet Governance. It centres its activities on the organisation of annual events, debates and talks, as well as training, capacity building and awareness-raising sessions on subjects related to Internet governance. A number of countries are implementing targeted projects either locally or nationally.”*
youthigf.com

Resource: [Annual Youth Internet Governance Forum Meetings](#)

University Centers & Institutes

There is a significant amount of activity happening on campuses across the globe related to Responsible Tech, with many new centers and institutes getting off the ground.

Are we missing a center or institute? Submit resources through AllTechIsHuman.org or directly to Sandra Khalil at Sandra@AllTechIsHuman.org.



RESPONSIBLE TECH UNIVERSITY CENTERS & INSTITUTES

4TU Centre for Ethics and Technology (@4TUethics) (Connects four universities in the Netherlands: Delf, Eindhoven, Twente, and Wgeningen) *"4TU.Ethics envisions a world in which technology is developed and used for benefit of humanity and the preservation of our planet. It is a world in which ethical considerations concerning human rights, well-being, global and intergenerational justice, the social good etc. are systematically included in practices of technology and engineering."* ethicsandtechnology.eu

Research Areas: law enforcement and privacy, smart cities design, machine learning models

AI & Society Lab (@hiig_berlin) *"The AI & Society Lab is an inter- and transdisciplinary research laboratory at the interface between research, industry and civil society. It explores the societal changes and challenges that arise from the introduction of artificial intelligence in political, social and cultural processes. The Lab aims to initiate new connections and productive exchanges between stakeholders and to enrich the discourse around AI with contributions that enable conscious and informed policy-making processes, for example through academic publications, multi-stakeholder workshops, public events or media productions. In doing so, the AI & Society Lab is on its way to becoming a thought leader for an inclusive, human rights-friendly and sustainable AI strategy in Europe."* hiig.de/en/research/ai-and-society-lab

Arizona State University, Center for Law, Science and Innovation (@ASUcollegeoflaw) *"As science and technology assume central roles in our lives, economy, and legal system, the Center for Law, Science and Innovation is uniquely positioned as an innovator in teaching and applying science, technology and law. From robotics to genetics, neuroscience to nanotech, LSI's innovative projects and programs constantly evolve to address challenging governance and policy issues through cutting-edge curriculum, practical experience, conferences and workshops, research projects, and scholarship."* law.asu.edu/centers/law-science-innovation

Boston University, Data Science for Good (@bu_cds) *"Boston University has long engaged students, faculty, and the community through educational and research programs that leverage technology to address societal challenges. These programs are critical for the development of academic and career pathways in support of the nascent field of Public Interest Technology (PIT) - or tech for social good....The goal of the DS4G Initiative at BU is to provide the infrastructure and visibility needed to expand BU's research, programs and curricula around civic-minded technology."* bu.edu/cds-faculty/programs/ds4g

California Polytechnic State University, Institute For Advanced Technology and Public Policy (@CalPoly) *"At the Institute for Advanced Technology and Public Policy, we explore today's most complex challenges in arenas such as energy, the environment, agriculture and government transparency. We identify and develop ways to use emerging technology to influence related public policy, and we partner with industry and government leaders to craft effective, real-world solutions ripe for implementation. Led by Founding Director and former State Senator Sam Blakeslee, the Institute's integrated approach to solving society's toughest problems engages the best and brightest students and faculty at Cal Poly, steeped in the University's Learn by Doing tradition and motivated to make a real and tangible difference in the world."* iatpp.calpoly.edu



RESPONSIBLE TECH UNIVERSITY CENTERS & INSTITUTES

Research Areas: Digital Democracy

California Polytechnic State University, Center for Expressive Technologies (@CetCalPoly) *“Housed in the College of Liberal Arts (CLA), the Center for Expressive Technologies (CET) facilitates and supports interdisciplinary projects focused on the intersection of human expression and technology...The Center contributes technically, creatively and intellectually to a broad range of research and design challenges that involve unique integrations of technology, communication, creativity, and human expression.”* cetcalpoly.org

Carnegie Mellon University, Block Center for Technology and Society (@CMUBlockCenter) *“The Block Center focuses on how emerging technologies will alter the future of work, how AI and analytics can be harnessed for social good, and how innovation in these spaces can be more inclusive and generate targeted, relevant solutions that reduce inequality and improve quality of life.”* cmu.edu/block-center/index

Research Areas: AI and analytics for good, seeding societal futures, future of work initiative, data-driven COVID-19 response

Carnegie Mellon University, Metro21: Smart Cities Institute (@metro21CMU) *“Metro21: Smart Cities Institute at Carnegie Mellon takes a forward-looking creative approach to bringing people, technology and policy together to significantly improve quality of life in metropolitan areas. This multidisciplinary effort employs research, development and deployment tactics with key partners to create and implement smart city solutions around the world.”* cmu.edu/metro21

Research Areas: smart infrastructure, safe mobility, net zero energy, equitable economic prosperity, clean air and water

Center for Information Technology Research in the Interest of Society Policy Lab (@CITRISPolicyLab) *“The CITRIS Policy Lab supports interdisciplinary technology policy research and engagement to better ensure development and deployment of technology in the interest of society... to address core questions regarding the role of formal and informal regulation in promoting innovation and amplifying its positive effects on society...For nearly 20 years, CITRIS and the Banatao Institute have brought together leading researchers at UC Berkeley, UC Davis, UC Merced, and UC Santa Cruz to advance information technology development and application for the public good in such areas as sustainable energy; water and transportation systems; robotics and artificial intelligence; civic engagement; and health care.”* citrispolicylab.org

Research Areas: computational propaganda, responsible AI, digital inclusion, democratic innovations

College of William and Mary, Center for Legal & Court Technology (@WMclct) *“The Center for Legal & Court Technology (CLCT) is a non-profit research, education, and consulting organization that works to improve the administration of justice through the use of technology. It aims to assist all members of the legal profession, from courts and government agencies to judges and lawyers.”* legaltechcenter.net

Research Areas: AI and Cyber



RESPONSIBLE TECH UNIVERSITY CENTERS & INSTITUTES

Cornell Tech, Digital Life Initiative (@dlicornelltech) *“We explore societal perspectives surrounding the development and application of digital technology, focusing on ethics, policy, politics, and quality of life...Embedded within the progressive teaching mission of Cornell Tech on Roosevelt Island, the Digital Life Initiative (DLI) was launched in 2017 to analyze the societal tensions arising from existing and emergent digital technologies. Inspired by the core values of justice, democracy, privacy, responsibility, security, and freedom, we support collaborative research projects that explore ethics, policy, politics and quality of life within prevailing socio-technical systems.”* dli.tech.cornell.edu

Research Areas: [Digital Correctives in Civic Spaces](#)

Duquesne University, Center for Ethics in Science, Technology, and Law (@duqedu) *“The Carl G. Grefenstette Center for Ethics in Science, Technology, and Law at Duquesne University, founded in 2019, is an interdisciplinary center to explore the intersection between ethics and science, technology, and law from a Catholic faith-based perspective.”* duq.edu/about/centers-and-institutes/grefenstette-center

Research Areas: [Privileges of Personhood](#), [Neither Artificial nor Intelligent](#)

Georgetown University, Beeck Center for Social Impact & Innovation (@beeckcenter) *“The Beecks created the Center to provide students and world leaders with new ways to impact society, in a cross disciplinary, hands-on, experiential way. Alberto and Olga Maria Beeck believe that social impact pervades all aspects of learning from business to policy to sciences. This is at the heart of the Beeck Center's multi-sectoral and multidisciplinary approach, and is a key to scale. They believe that engaging students and practitioners to innovate scalable solutions, as well as incubating and testing their ideas, can deliver the right social impact outcomes.”* beeckcenter.georgetown.edu

Research Areas: [creating impact in digital government](#), [responsible data use](#)
[playbook for data-sharing collectives](#)

Georgetown University, Center on Privacy and Technology (@GeorgetownCPT) *“The Center on Privacy & Technology at Georgetown Law is a think tank focused on privacy and surveillance law and policy—and the communities they affect ... through research and advocacy, we challenge that surveillance and work towards a world where privacy protects everyone.”* law.georgetown.edu/privacy-technology-center

Research Areas: [privacy](#), [surveillance](#), and [civil rights](#)

Georgetown University, Center for Digital Ethics *“[The Center for Digital Ethics aims] to frame the terms, design the systems, critique the contours, provide the guide rails and imagine the future of digital technologies and ethics for the betterment of humanity.”* digitaletics.georgetown.edu

Georgetown University, Center for Security and Emerging Technologies (@CSETGeorgetown) *“CSET produces data-driven research at the intersection of security and technology, providing nonpartisan analysis to the policy community. CSET is currently focusing on the effects of progress in artificial intelligence (AI), advanced computing and biotechnology. We seek to prepare a new generation of decision-makers to address the challenges and opportunities of emerging technologies.”* cset.georgetown.edu



RESPONSIBLE TECH UNIVERSITY CENTERS & INSTITUTES

Research Areas: AI and national security

Georgetown University, Ethics Lab (@EthicsLab) *“Georgetown’s Ethics Lab is a unique team of philosophers and designers using new methods to tackle a morally complex world. We bring together deep ethical expertise with creative methods from Design to teach students and empower experts to address the most urgent issues of our time – and responsibly shape our future...Ethics Lab courses combine deep learning with active exercises and team projects to give students the knowledge and skills to be moral leaders in emerging technology, medicine, and politics.”*
ethicslab.georgetown.edu

Research Areas: embedded ethics, collaborative tech policy, responsible CS

Georgetown University, Institute for Technology Law & Policy (@georgetownlaw) *“We train the next generation of lawyers and lawmakers with deep expertise in technology law and policy. Our Institute provides a uniquely valuable forum in Washington, DC for policymakers, academics and technologists to discuss the most pressing issues and opportunities in technology law today.”*
law.georgetown.edu/tech-institute

Research Areas: civil justice data commons

Georgetown University, Massive Data Institute (@mccourtschool) *“The Massive Data Institute (MDI) at Georgetown’s McCourt School of Public Policy focuses on the secure and responsible use of data to answer public policy questions. MDI works with researchers in government, academia, and industry to solve societal-scale problems using novel and traditional large-scale data sources. MDI’s strategic partnerships promote community and innovation across the health, social, computer, and data sciences.”* mccourt.georgetown.edu/research/the-massive-data-institute

Research Areas: data governance, population measurement, civil justice

George Washington University, Digital Trade and Data Governance Hub (@datagovhub) *“Today, researchers and firms use insights gleaned from analysis of large data sets to create new goods and services (a data-driven economy). Society will need to develop new rules to govern the use of that data. But given different national norms regarding data and the rapid pace of data-driven technological development, it will not be easy to find common ground on domestically and internationally accepted policies. The Hub works to help stakeholders and policymakers understand digital trade and data governance issues.”* datagovhub.elliott.gwu.edu

Research Areas: global data governance mapping

Georgia Institute of Technology, Institute for People and Technology (@IPaTGT) *“Our goal is to maximize Georgia Tech’s societal impact through people-centered innovation....Shaping the future of human-centered systems, environments, and technologies to promote fulfilling, healthy, and productive lives.”* ipat.gatech.edu

Research Areas: lifelong health and well-being, smart cities and inclusive innovation, shaping the human technology frontier, platforms and services for socio-technical systems



RESPONSIBLE TECH UNIVERSITY CENTERS & INSTITUTES

Harvard University, Berkman Klein Center (@BKCHarvard) *"The Berkman Klein Center for Internet & Society at Harvard University is dedicated to exploring, understanding, and shaping the way we use technology."* cyber.harvard.edu

Research Areas: [digital citizenship](#) + [resource platform](#)

Harvard University, Embedded EthiCS (@Harvard) *"The aim of Embedded EthiCS is to teach students to consider not merely what technologies they could create, but whether they should create them."* embeddedethics.seas.harvard.edu

Research Areas: [ethical reasoning in CS curriculum](#), [Institute for Rebooting Social Media](#) (3-year pop-up institute)

Harvard University, Public Interest Technology Lab (@Harvard) *"We help shape the future of technology and society to advance equity, expand opportunity and protect basic rights and liberties...The Public Interest Tech Lab at Harvard provides Harvard students and faculty with access to technological infrastructures, gadgets, algorithms, know-how and key resources to better understand how technology can either worsen or address society's greatest challenges."* harvardtechlab.org

Harvard University, Shorenstein Center on Media, Politics, & Public Policy (@ShorensteinCtr) *"The Shorenstein Center on Media, Politics and Public Policy is a Harvard Kennedy School research center dedicated to exploring and illuminating the intersection of press, politics and public policy in theory and practice. The Center strives to bridge the gap between journalists and scholars, and between them and the public." Research initiatives include Disinformation, Tech Policy, Public Interest Technology, Public Interest Journalism, and Local News"* shorensteincenter.org

Research Areas: [The Media Manipulation Casebook](#)

The Humboldt Institute for Internet and Society (@hiig_berlin) *"The Alexander von Humboldt Institute for Internet and Society (HIIG) was founded in 2011 to research the development of the internet from a societal perspective and better understand the digitalisation of all spheres of life. As the first institute in Germany with a focus on internet and society, HIIG has established an understanding that centres on the deep interconnectedness of digital innovations and societal processes. The development of technology reflects norms, values and networks of interests, and conversely, technologies, once established, influence social values."* hiig.de

Research Areas: [Evolving Digital Society](#), [Data](#), [Actors](#), [Infrastructures](#), [Knowledge & Society](#)

Massachusetts Institute of Technology, Responsible AI for Social Empowerment and Education (RAISE) (@MITRaise) *"RAISE is a new MIT-wide initiative headquartered in the MIT Media Lab and in collaboration with the MIT Schwarzman College of Computing and MIT Open Learning. In the face of this accelerating change, our research and impact mission is to advance equity in learning, education and computational action to rethink and innovate how to holistically and equitably prepare diverse K-12 students, an inclusive workforce, and lifelong learners to be successful, responsible, and engaged in an increasingly AI-powered society."* raise.mit.edu

Research Areas: [Inclusive AI Literacy and Learning](#)



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Massachusetts Institute of Technology, Internet Policy Research Initiative (@mit_ipri) *"The Internet Policy Research Initiative (IPRI) collaborates with policymakers and technologists to improve the trustworthiness and effectiveness of interconnected digital systems like the Internet. Our work provides global policymakers with technically grounded guidance for policies regarding cybersecurity, Internet privacy, and more."* internetpolicy.mit.edu

Research Areas: [Security](#), [AI policy](#), [privacy](#), [networks](#), [decentralized web](#), [app inventor](#)

Massachusetts Institute of Technology, Media Lab (@medialab) *"An antidisciplinary research community and graduate program at MIT focused on the study, invention, and creative use of emerging technologies."* media.mit.edu

Research Areas: [The Human Dynamics group](#)

Massachusetts Institute of Technology, Social and Ethical Responsibilities of Computing (@MIT_SCC) *"The Social and Ethical Responsibilities of Computing (SERC) [at MIT Schwarzman College of Computing] is facilitating the development of responsible "habits of mind and action" for those who create and deploy computing technologies and fostering the creation of technologies in the public interest."* computing.mit.edu/cross-cutting/social-and-ethical-responsibilities-of-computing

Research Areas: [Case studies in social and ethical responsibilities of computing](#)

McGill University, Center for Media, Technology and Democracy (@MediaTechDem) *"The Center produces critical research, policy activism, and inclusive events that inform public debates about the changing relationship between media and democracy, and that ground policy aimed at maximizing the benefits and minimizing the systemic harms embedded in the design and use of emerging technologies."* mediatechdemocracy.com

Research Areas: [Public Policy and Advocacy Initiatives](#)

New York University, Center for Critical Race and Digital Studies (@centerforcrds) *"The Center for Critical Race & Digital Studies is affiliated with NYU's Institute of Human Development & Social Change. The Center for Critical Race and Digital Studies produces cutting edge research that illuminates the ways that race, ethnicity and identity shape and are shaped by digital technologies."* criticalracedigitalstudies.com

Research Areas: [Digital/social media literacy](#), [youth development](#), [surveillance](#), [digital activism](#), [racial targeting and inequality in digital ads](#), [AI](#), [digital cultural production](#)

New York University, Center for Responsible AI (@AIResponsibly) *"We build the future in which responsible AI is the only AI...The Center for Responsible AI (R/AI) is making AI work for everyone. We catalyze policy and industry impact, foster interdisciplinary research and education, and build an equitable and socially sustainable ecosystem of AI innovation."* airesponsibly.com

Research Areas: [We are AI](#)

RESPONSIBLE TECH UNIVERSITY CENTERS & INSTITUTES

New York University, Center for Social Media and Politics (@CSMaP_NYU)

“Through cutting-edge research, NYU’s Center for Social Media and Politics works to understand politics, inform public policy, and strengthen democracy in the digital age. Over the past two decades, social media and other digital technologies have transformed our society. It’s made it easier than ever to find information, engage with politics, and connect with people across the globe. But it’s also helped fuel misinformation, enable harassment, and foment polarization, presenting urgent challenges to democratic governance. NYU’s Center for Social Media and Politics (CSMaP) is a leading academic research institute studying how this ever-shifting online environment impacts politics, policy, and democracy.” csmapnyu.org

Research Areas: [Areas of Study](#)

New York University, Engelberg Center on Innovation Law & Policy

“By fostering interdisciplinary and collaborative research on innovation law and policy, the Engelberg Center attracts legal scholars and practitioners, technologists, economists, social scientists, physical scientists, historians, innovators, and industry experts who study the incentives that motivate innovators, how those incentives vary among creative endeavors, and the laws and policies that help or hinder them.” law.nyu.edu/centers/engelberg

Research Areas: [Open Source Hardware, Data Portability and Interoperability](#)

New York University, Guarini Institute for Global Legal Studies: Global Law & Tech (@GuariniGlobal)

“Brings together in-depth inter-disciplinary study, practice, and exploration of legal and regulatory issues that are transforming legal practice in a new global landscape.” guariniglobal.org

Research Areas: [data governance and inequality, AI ethics](#)

New York University, Information Law Institute (@ILI_NYU) “The Privacy Research Group is a weekly meeting of students, professors, and industry professionals who are passionate about exploring, protecting, and understanding privacy in the digital age.” law.nyu.edu/centers/ili

Research Areas: [Metadata, Algorithms and Automation, Government Surveillance, Security, Privacy, Engineering, Social and Organizational Monitoring](#)

Northeastern University, Center for Inclusive Computing (@Northeastern)

“Founded in 2019, the Center for Inclusive Computing at Northeastern University partners with colleges and universities to materially increase the representation of women computing graduates. These partnerships focus on addressing and removing the institutional barriers that exclude women of all races and ethnicities from discovering and thriving in computing programs.” cic.northeastern.edu

Research Areas: [Grantmaking, Technical Advising, Data Collection](#)

Ohio State University, Battelle Center for Science, Engineering, and Public Policy (@OSU_BattelleCtr)

“Ohio State Battelle Center is training the next generation of leaders to innovate beyond technology to make a difference in the public interest...As public interest technologists, we lead interdisciplinary teams from across the university to develop solutions for humanitarian and national security challenges.”

battellecenter.osu.edu



RESPONSIBLE TECH UNIVERSITY CENTERS & INSTITUTES

Research Areas: Monitoring and mitigating online misinformation, pandemic preparedness and response, policy for innovation and emerging technologies

Ohio State University, Translational Data Analytics Institute (@OSUbigdata) *"Ohio State Translational Data Analytics Institute brings together university faculty and students with industry and community partners to create data science and analytics solutions to grand challenges for the greater good."* tdai.osu.edu

Research Areas: Program on data and governance

Pardee RAND, Tech & Narrative Lab (@PardeeTechLab) *"In Pardee RAND's Tech + Narrative Lab (TNL), policy analysts can apply new and emerging technologies to study policy problems and create novel policy solutions, as well as understand the policy implications of new and emerging technologies... The lab also embraces the themes of ethics, social justice, and racial equity, and actively encourages emerging technology experimentation focused on these topics."* technarrativelab.org

Research Areas: Hackathons, workshops, residencies

Princeton University, Center for Information Technology and Policy (@PrincetonCITP) *"CITP is an interdisciplinary center at Princeton University. The center is a nexus of expertise in technology, engineering, public policy, and the social sciences on campus. In keeping with the strong University tradition of service, the center's research, teaching, and events address digital technologies as they interact with society."* citp.princeton.edu

Research Areas: PIT summer fellowship

Princeton University, IDA B. WELLS Just Data Lab (@PrincetonAAS) *"Housed in Princeton University's Department of African American Studies, the IDA B. WELLS Just Data Lab brings together students, educators, activists, and artists to develop a critical and creative approach to data conception, production, and circulation. Our aim is to rethink and retool the relationship between stories and statistics, power and technology, data and justice."* www.thejustdatalab.com

Research Areas: Resources

Santa Clara University, The Internet Ethics Program at the Markkula Center for Applied Ethics (@IEthics) *"The Markkula Center for Applied Ethics explores privacy, big data, social media, the 'right to be forgotten,' cybersecurity, and other issues in Internet Ethics."* scu.edu/ethics/focus-areas/internet-ethics

Research Areas: Santa Clara Principles

Stanford University, Center for Youth Mental Health and Wellbeing (@StanfordPSY) *"Their Media and Mental Health Initiative co-designs with youth and implements interventions to support the mental health and wellbeing of young people ages 12-25, including the youth-led #goodformedia project."* med.stanford.edu/psychiatry/special-initiatives/youthwellbeing

Research Areas: Good for Media Project



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Stanford University, Institute for Human-Centered AI (@StanfordHAI) “The mission of HAI is to advance AI research, education, policy and practice to improve the human condition. Led by faculty from multiple departments across Stanford, research focuses on developing AI technologies inspired by human intelligence; studying, forecasting and guiding the human and societal impact of AI; and designing and creating AI applications that augment human capabilities...What’s unique about HAI is that it balances diverse expertise and integration of AI across human-centered systems and applications in a setting that could only be offered by Stanford University. Stanford’s seven leading schools on the same campus, including a world-renown computer science department, offer HAI access to multidisciplinary research from top scholars.” hai.stanford.edu

Research Areas: [2022 Fall conference on AI in the Loop: Humans in Charge](#), [2021 Artificial Intelligence Index Report](#), [AI Audit Challenge](#)

Stanford University, McCoy Family Center for Ethics in Society - Ethics, Society, and Technology Hub (@stanfordethics) “Stanford has launched a new Ethics, Society, and Technology (EST) Hub. The mission of the EST Hub is to deepen Stanford’s strength in ethics and generate a fundamental shift in how faculty, staff, and students, whatever their disciplinary home, choice of major, and career pathway, think about our role as enablers and shapers of scientific discovery and technological change in society. The Hub is managed jointly by the McCoy Family Center for Ethics in Society and the Center for Advanced Study in the Behavioral Sciences” ethicsinsociety.stanford.edu/ethics-society-technology-hub

Research Areas: [2022 Collaborative research and projects](#)

Stanford University, Poverty & Technology Lab (@CenterPovIneq) “The simple objective of the Stanford Poverty & Technology Lab is to turn Silicon Valley “against itself” by developing technology-based solutions to problems that are, in part, technology-driven. The Poverty & Technology Lab will be the first lab dedicated to leveraging the data and technology revolution to create new, lasting, and low-cost solutions to poverty and inequality in the United States.” inequality.stanford.edu/stanford-technology-poverty-lab

Research Areas: [CPI Research](#)

Tufts University, Hitachi Center for Tech and International Affairs (@hitachicenter) “The Hitachi Center is a part of The Fletcher School at Tufts University. Its mission is to sponsor advanced research and instruction, demonstrate intellectual and professional leadership, and encourage and facilitate a global exchange of ideas on the management of innovation and technological change and the advancement of economic and financial integration.” sites.tufts.edu/hitachi

Research Areas: [Faculty Research](#), [Student Research](#)

University of Arizona, Center for Digital Society and Data Studies (@UAZiSchool) “The Center’s mission is to maximize the positive outcomes afforded by emerging analytical tools and information technologies, while minimizing the risks presented by these new opportunities. The development of actionable plans and new understandings of underlying psychological, social, and technical processes will lead to changing policies tied to technological innovations, and will lead to improved tools over time.” cdsds.arizona.edu



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Research Areas: [Research Overview](#)

University of Bristol, Bristol Digital Futures Institute (@DigiFutures) “At Bristol Digital Futures Institute, we’re shaping a digital future that works for all. Our mission is to transform the way we create new digital technology for inclusive, prosperous and sustainable societies.” bristol.ac.uk/bristol-digital-futures-institute

Research Areas: [Research Projects](#)

University of Bristol, ESRC Centre for Sociodigital Futures (@BristolUni) “Digital technologies, devices and data are woven into the fabric of contemporary societies. The social and digital are co-evolving in a sociodigital world. Social Scientists are very good at understanding changes that have taken place to date. The more critical question, however, is how to understand sociodigital futures and what might be done to tip these towards fairer and more inclusive ways of life. This is the mission of the newly-established ESRC Centre for Sociodigital Futures.” bristol.ac.uk/fssl/research/sociodigital-futures

University of Bristol, Ethics and Responsible Research and Innovation (RRI) (@BrisSynBio) “Ethics and Responsible Research and Innovation (RRI) is a cross-cutting research theme at BrisSynBio led by Professor Julie Kent (UWE, Bristol) and Dr Darian Meacham (UWE, Bristol). The investigators work directly with BrisSynBio’s researchers to understand and explore the ethical, legal, social, environmental and philosophical questions that emerge from research in the Centre. The aim is to better understand what “Responsible Research and Innovation” means in the context of synthetic biology and to implement reflective practices across the Centre.” bristol.ac.uk/brissynbio

University of Bristol, National Research Centre on Privacy, Harm Reduction and Adversarial Influence Online (@REPHRAIN1) “Announced by UK Research and Innovation (UKRI) on 14 October 2020, REPHRAIN will explore how to keep people safe online while allowing them to fully participate in digital technologies and the contributions they make to an innovative, inclusive and healthy economy and society.” rephrain.ac.uk

Research Areas: [REPHRAIN Toolbox](#)

University of California - Berkeley, Algorithmic Fairness and Openness Group (@AfogBerkeley) “The Algorithmic Fairness and Opacity Group (AFOG) is an interdisciplinary research group housed at the UC Berkeley School of Information, bringing together faculty, postdocs, and graduate students from Information Studies, Sociology, Law, Communication, Media Studies, Computer Science, and the Humanities, among others. We conduct research, education, develop policy, build systems, bring theory into practice, and bridge disciplinary boundaries. Throughout our efforts, we center human values in the design and use of technical systems to support more equitable and just societies.” afog.berkeley.edu

Research Areas: [PIT-UN Network Grant](#)

University of California - Berkeley, Center for Effective Global Action (@CEGA_UC) “CEGA’s mission is to improve lives through innovative research that inspires positive social change...CEGA supports activities at all stages of the innovation-



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research-policy impact cycle...With close ties to Silicon Valley, we embrace the transformative power of technology while recognizing that it is not a silver bullet.”
cega.berkeley.edu

Research Areas: [CEGA-funded research projects](#)

University of California - Berkeley, Center for Human-Compatible AI
(@CHAI_Berkeley) *“The goal is to develop the conceptual and technical wherewithal to reorient the general thrust of AI research towards provably beneficial systems.”*
humancompatible.ai

University of California - Berkeley, Center for Law & Technology
(@BerkeleyLawBCLT) *“The mission of the Berkeley Center for Law & Technology (BCLT) is to foster the beneficial and ethical advancement of technology by guiding the development of intellectual property law, information privacy law, and related areas of law and public policy as they interact with business, science, and technical innovation.”*
law.berkeley.edu/research/bclt

Research Areas: [Featured Research](#)

University of California - Berkeley, Center for Long-Term Cybersecurity
(@CLTCBerkeley) *“Our mission is to help individuals and organizations address tomorrow’s information security challenges to amplify the upside of the digital revolution.”* cltc.berkeley.edu

Research Areas: [AI policy hub](#), [AI security initiative](#), [citizen clinic](#), [ML fairness mini-bootcamp](#)

University of California - Berkeley, Center for Technology, Society & Policy
(@CTSPBerkeley) *“The Center for Technology, Society & Policy is a multidisciplinary research and design/build center focusing on the emergent social and policy issues arising from the development and adoption of technology.”* ctsp.berkeley.edu

Research Areas: [citizen technologist blog](#)

University of California - Berkeley, Greater Good Science Center
(@GreaterGoodSC) *“The Greater Good Science Center studies the psychology, sociology, and neuroscience of well-being and teaches skills that foster a thriving, resilient, and compassionate society.”* ggsc.berkeley.edu

Research Areas: [The Youth Gratitude Project](#), [Thnx4](#), [The Science of Happiness](#)

University of California - Berkeley, Samuelson Law, Technology & Public Policy Clinic
(@SamuelsonClinic) *“The clinic advances the public interest in a rapidly changing digital age, focusing on civil liberties, intellectual property, and criminal justice.”* law.berkeley.edu/experiential/clinics/samuelson-law-technology-public-policy-clinic

University of California - Los Angeles, Center for Critical Internet Inquiry
(@C2i2_UCLA) *“UCLA Center for Critical Internet Inquiry (C2i2) is an intersectional research community committed to reimagining technology, championing racial justice, and strengthening democracy through a mix of research, culture, and policy.”*
c2i2.ucla.edu/home



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Research Areas: [minderoo initiative on tech & power](#)

University of Edinburgh, Centre for Data, Culture & Society (@EdCDCS) “Our mission is to support, facilitate, promote and inspire data-led and applied digital research across the arts, humanities and social sciences.” cdcs.ed.ac.uk

Research Areas: [Research Clusters](#)

University of Edinburgh, Centre for Technomoral Futures (@UoE_EFI) “Our mission at the Centre for Technomoral Futures is to unify technical and moral modes of future-building expertise in new models of research, education, design and engagement that directly serve the goals of sustainable, just and ethical innovation...The Centre for Technomoral Futures is a home for developing more constructive modes of innovation: innovation that preserves and strengthens human ties and capabilities; that builds more accessible and just paths to public participation in the co-creation of our futures; and that reinvests the power of technology into the repair, maintenance and care of our communities and our planet.” efi.ed.ac.uk/centre-technomoral-futures

Research Areas: [FinTech, Data Civics, Future Infrastructures, Ethics of data and AI](#)

University of Massachusetts - Amherst, The Initiative for Digital Public Infrastructure (@iDPI_umass) “The Initiative for Digital Public Infrastructure studies, imagines and builds a new, more resilient Internet for the public good; an Internet guided by the values of users and their communities rather than those of corporations and investors.” publicinfrastructure.org

Research Areas: [Blog](#)

University of Michigan, Center for Ethics, Society, and Computing (@UMich) “The ESC key was added to the computer keyboard to interrupt a program when it produced unwanted results, allowing the system to be critically examined. In the same way, the Center for Ethics, Society, and Computing (ESC – pronounced “escape”) is dedicated to intervening when digital media and computing technologies reproduce inequality, exclusion, corruption, deception, racism, or sexism. ESC is a research center and a collective of scholars committed to feminist, justice-focused, inclusive, and interdisciplinary approaches to computing. We are invested in the social, cultural, and political dimensions of digital technologies. We intercede in structures of power and inequality. We work with educators, workers, industrial practitioners, and policymakers.” esc.umich.edu

Research Areas: [Disinformation as Infrastructure, Ethics of Emotion Recognition](#)

University of Michigan, Center for Social Media Responsibility (@UMSI) “The University of Michigan Center for Social Media Responsibility (CSMR) addresses the negative effects of broad access to the means of public communication, while amplifying positive effects. Technologists at social media companies (product managers, designers, and engineers) are the day-to-day policymakers of today's social media landscape. CSMR, established in 2018, articulates principles and creates metrics and tools that empower technologists to set responsible policy. We are devoted to understanding how the contemporary information environment is influencing the public and what we can do about it. Our mission is to help media platforms meet their public responsibilities.” esc.umich.edu



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Research Areas: Platform Health Metrics

University of North Carolina - Chapel Hill, Center for Information, Technology, and Public Life (@unc_citap) *"The Center for Information, Technology, and Public Life (CITAP) is dedicated to understanding the growing impact of the internet, social media, and other forms of digital information sharing in the context of the people who design, use, and govern them."* citap.unc.edu

Research Areas: Recent Publications

University of Notre Dame, IBM, Tech Ethics Center & Lab (@techethicslab) *"Dedicated to interdisciplinary research on the impact of technology on humanity. The Technology Ethics Center at the University of Notre Dame convenes global thought leaders in academia, industry, non-profit organizations, and governmental agencies to develop ethical and legal frameworks that keep pace with technological development." At the Tech Ethics Lab ("Turning Theory Into Practice"), "we promote human values in technology through tangible, applied, and interdisciplinary research that addresses core ethical questions."* techethicslab.nd.edu

Research Areas: auditing AI initiative

University of Notre Dame, Technology Ethics Center (@techethicsnd) *"Dedicated to interdisciplinary research on the impact of technology on humanity. The Technology Ethics Center at the University of Notre Dame convenes global thought leaders in academia, industry, non-profit organizations, and governmental agencies to develop ethical and legal frameworks that keep pace with technological development."* techethics.nd.edu

Research Areas: Publications

University of Oxford, Institute for Ethics in AI (@EthicsInAI) *"The Institute for Ethics in AI will bring together world-leading philosophers and other experts in the humanities with the technical developers and users of AI in academia, business and government. The ethics and governance of AI is an exceptionally vibrant area of research at Oxford and the Institute is an opportunity to take a bold leap forward from this platform."* schwarzmancentre.ox.ac.uk/ethicsinai

Research Areas: democracy, governance, human rights, human well-being, environment, society

University of Oxford, Leverhulme Centre for the Future of Intelligence (@LeverhulmeCFI) *"Based at the University of Cambridge, with partners at the Oxford Martin School at the University of Oxford, at Imperial College London, and at the University of California, Berkeley, mission is to build a new interdisciplinary community of researchers, with strong links to technologists and the policy world, and a clear practical goal: to work together to ensure that we humans make the best of the opportunities of artificial intelligence as it develops over coming decades."* lcfi.ac.uk

Research Areas: intelligence, AI: futures and responsibility, trust and society, narrative and justice, innovation and praxis



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University of Oxford, Oxford Internet Institute (@oiioxford) *"The Oxford Internet Institute (OII) is a multidisciplinary research and teaching dept at University of Oxford, dedicated to the social science of the Internet."* oii.ox.ac.uk

Research Areas: [Industrialized Disinformation 2020 Global Inventory of Organized Social Media Manipulation](#)

University of Oxford, Responsible Tech Institute (@CompSciOxford) *"The Responsible Technology Institute (RTI) is an international centre of excellence on responsible technology. It serves to establish a creative and robust community to discuss and develop culturally nuanced approaches to responsibility and responsible innovation (RI). It takes an international focus on the societal challenges presented by new and emergent technologies, unpacks complexities around understandings of responsibility and different regulatory environments, and addresses gaps that exist in industry-related approaches to responsible technology."* cs.ox.ac.uk

Research Areas: [algorithms and complexity theory](#), [AI and ML](#), [automated verification](#), [computational biology and health informatics](#), [data and knowledge](#), [human center computing](#), [programming languages](#), [quantum](#), [security](#), [systems](#)

University of Pennsylvania, Warren Center for Network & Data Sciences (@WarrenCntrPenn) *"The Warren Center for Network & Data Sciences fosters research and innovation in interconnected social, economic and technological systems."* warrencenter.upenn.edu

Research Areas: [social norms for algorithms](#), [resilience in networked systems](#), [evolution](#), [emergence](#), [and the brain](#), [consensus and contagion in society](#), [ubiquity of data](#)

University of San Francisco, Center for Applied Data Ethics (@usfca) *"At the Center for Applied Data Ethics (CADE), we are working to address ethical issues such as the magnification of unjust bias, increased surveillance, spread of disinformation, alarming uses of predictive policing, a lack of accountability for tech companies, and more. Our focus is on having a direct, practical impact. Our work includes a mix of education, research, public policy, and civil advocacy."* usfca.edu/data-institute/initiatives/center-applied-data-ethics

University of Toronto, Center for Ethics - Ethics of AI Lab (@UofTEthics) *"Since 2017, the Ethics of AI Lab at the University of Toronto's Centre for Ethics has fostered academic and public dialogue about Ethics of AI in Context—the normative dimensions of artificial intelligence and related phenomena in all aspects of private, public, and political life"* ethics.utoronto.ca/ethics-of-ai-in-context-eaic4e

Research Areas: [Ethics of AI in Context](#)

University of Toronto, Citizen Lab (@citizenlab) *"The Citizen Lab is an interdisciplinary laboratory based at the Munk School of Global Affairs & Public Policy, University of Toronto, focusing on research, development, and high-level strategic policy and legal engagement at the intersection of information and communication technologies, human rights, and global security."* citizenlab.ca

Research Areas: [Citizen Lab Tools & Research](#)

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University of Toronto, Schwartz Reisman Institute for Technology and Society (@TorontoSRI) *"We believe humanity still has the power to shape the technological revolution in positive ways, and we're here to connect and collaborate with the brightest minds in the world to make that belief a reality. The integrative research we conduct rethinks technology's role in society, the contemporary needs of human communities, and the systems that govern them. We're investigating how best to align technology with human values and deploy it accordingly. The human-centered solutions we build are actionable and practical, highlighting the potential of emerging technologies to serve the public good while protecting citizens and societies from their misuse."* srinstitute.utoronto.ca

Research Areas: Four Conversations: The Information Order, Human Values, Value Alignment, The Meaning of Technology

University of Virginia, Center for Data Ethics and Justice (@uvadatascience) *"Centering ethics and justice at the core of data science The Center for Data Ethics and Justice equips researchers, faculty and students at the University of Virginia to address relevant ethical, social and political issues that intersect with data science."* datascience.virginia.edu/center-data-ethics-and-justice

Research Areas: openness initiative, digital platforms initiative, relational ethics initiative

University of Washington, Center for an Informed Public (@uwcip) *"We have assembled world-class researchers, labs, thought leaders, and practitioners to translate research about misinformation and disinformation into policy, technology design, curriculum development, and public engagement."* cip.uw.edu

Research Areas: resisting strategic misinformation, promoting an informed society, strengthening democratic discourse

University of Washington, Information and Communication Technology for Development Lab (@uwcse) *"Information and Communication Technology for Development (ICTD) Lab is an interdisciplinary group that explores how technology can improve the lives of underserved populations in low-income regions. Our research has wide range that includes HCI, Systems, Communication and Data Analytics."* ictd.cs.washington.edu

Research Areas: human computer interactions (HCI), systems, networks and communication, security, behavior change communication, global health, data analytics, digital financial services

University of Washington, Tech Policy Lab (@techpolicylab) *"The Tech Policy Lab is a unique, interdisciplinary collaboration at the University of Washington that aims to enhance technology policy through research, education, and thought leadership. Founded in 2013 by faculty from the University's Allen School of Computer Science & Engineering, Information School, and School of Law, the Lab aims to bridge the gap between technologists and policymakers and to help generate wiser, more inclusive tech policy."* techpolicylab.uw.edu

Research Areas: policy tools, emerging technology, contexts



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Virginia Tech, Tech4Humanity Lab (@BitsBytesRights) *“The Tech4Humanity Lab is a transdisciplinary laboratory at Virginia Tech, focusing on the impact of technology on the human condition. Our lab emphasizes issues of human security broadly constituting political, medical, social, economic and environmental securities. The lab utilizes transdisciplinary research, combining practices from political science, law, computer science, humanities, engineering, business, biology, public health, and area studies.”*
tech4humanitylab.org

Research Areas: [OSINT-in-a-box](#)

Washington University St. Louis, Center for Trustworthy AI in Cyber-Physical Systems (CPS) (@WUSTL) *“The Center conducts research to advance trustworthy AI-driven CPS engineering. The Center will develop methods, tools, procedures, solutions, hardware, software, and integrated systems that result in AI-driven CPS that are secure, safe, reliable, and resilient. Vision: The Center is known as a leading academic institution of global consequence in trustworthy AI-driven cyber-physical systems. Impact: To achieve this vision, we will be at the vanguard of trustworthy AI in CPS research, generate innovations that can be leveraged by society, and engage in meaningful collaborations with industry, government, and academia on a regional, national, and global basis.”* sites.wustl.edu/trustworthyai

Research Areas: [Secure CPS](#), [Safe and Secure AI Integration](#), [Safety and Security of Decentralized CPS](#), [Interpretability of AI-driven CPS](#)

Wesleyan University, Black Box Labs (@wesleyan_u) *“Black Box Labs (est. 2020) is a research and training laboratory in the Science in Society Program at Wesleyan University that offers students training in qualitative research methods aligned with science and technology studies and the opportunity to collaborate with faculty on research...Our vision is that Black Box Labs will be a generative force for faculty-student-community research collaborations that draw upon the methodological insights of science and technology studies to do the work of science, technology, and social justice. As a lab, we are inspired by the radical spaces of critical scholars, activists, revolutionaries, and performers around the world who conspire for justice, freedom, and liberation. We aim to decipher methods, translate technoscience, and foster justice.”* blackboxlabs.wescreates.wesleyan.edu

Research Areas: [Projects](#)

Worcester Polytechnic Institute, Institute of Science and Technology for Development (@WPI) *“As an integral part of WPI's Global Initiatives and the work of The Global School, the Institute of Science and Technology for Development seeks to advance the ways science and technology can solve pressing global problems from the individual to the global level. To meet these goals, we foster alliances between communities, private sector firms, NGOs, government, and universities from around the world. We collaborate with our community to identify challenges, develop co-produced design solutions, and cultivate the necessary resources to sustain these solutions.”*
wpi.edu/academics/science-technology-development

Research Areas: [health and biotechnology](#), [robotics and IoT](#), [advanced materials and manufacturing](#), [cyber](#), [data](#), and [security](#), [learning sciences](#)

MULTISTAKEHOLDER CONVENING

Community Slack group

Summits & mixers

Multi-sector working groups

MULTIDISCIPLINARY EDUCATION

Community reports

University ambassadors

Livestream series

DIVERSIFYING THE PIPELINE

Responsible Tech Guide

Job Board & Talent Pool

Mentorship Program

Get involved with All Tech Is Human! Our non-profit is committed to co-creating a better tech future, and our wide range of activities are designed to expand & connect the Responsible Tech ecosystem across different stakeholders, disciplines, career levels, and perspectives.



Get to Know the Responsible Tech Ecosystem

Learn about the wide variety of people across multiple sectors and backgrounds working toward a better tech future.

Lucia Asanache

Community Lead, Tech & Public Policy at the Tony Blair Institute



What are the most pressing and important topics in Responsible Tech?

In no particular order, 1) building diverse technologies, 2) internet access, connectivity and basic digital skills, 3) building a profile and toolkit for tech-for-good initiatives.

How did YOU pave your career in the Responsible Tech field? What advice would you give to college & grad students looking to be involved in the Responsible Tech ecosystem?

In my experience, interest and curiosity in how the world works lead you onto a natural path towards the role tech plays in building fairer, more equitable societies. From here, curating your sources of information, meeting interesting people and voices in the space helped steer my enthusiasm towards roles and people that opened doors to the world of tech policy. Ask questions, challenge the headlines and take your seat at the debate table - you could be the future leader we are all needing and hoping for.

What impact is your organization having on the Responsible Tech ecosystem?

At the Tony Blair Institute, we are on a mission to equip leaders in mastering the tech revolution in order to tackle some of the world's biggest challenges such as climate, health, preserving democracy and more. By convening expert voices around a clear mission, to advance a new progressive agenda, we seek to inform and educate communities around these issues about tech's potential for good, what role key players in our society have in it and breaking the knowledge barriers. Our work spans key issues in tech, from modernising institutions fit for the 21st Century, forward-looking policies that keep the internet at the core, tech's potential to sort out health, food, environment crises through science and innovation, and more.

What are the biggest hurdles with the Responsible Tech movement right now?

As with any movement trying to bring together ideas and change mentalities, the danger of being seen as operating in isolation from tech development and adoption. 'Just another initiative' type narrative.

What organizations and/or individuals do you believe are making a large impact with building a better tech future?

This is such a great question and one that makes me appreciate the value in having a one stop shop for Responsible Tech featuring individual and organisational voices that deserve a shout-out and engaging with. From the top of my mind, Women in AI Ethics Network (co-founded by Mia Shah-and), Ada Lovelace Institute, and many others!

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What about our society has to change to push for more Responsible Tech?

More coordinated and visible public pressure on big tech and governments to take a stance where not already. There are some great initiatives that need a platform or a push to make real impact.

Connect with Lucia Asanache @lucia_asanache

"In my experience, interest and curiosity in how the world works lead you onto a natural path towards the role tech plays in building fairer, more equitable societies."

-Lucia Asanache, Community Lead, Tech & Public Policy at the Tony Blair Institute

Casey Fiesler

*Assistant Professor, Information Science,
University of Colorado Boulder*



How did YOU pave your career in the Responsible Tech field? What advice would you give to college & grad students looking to be involved in the Responsible Tech ecosystem?

One amazing thing about the responsible tech space, particularly in the academic corner, is that it crosses so many disciplinary boundaries. I could list at least a dozen different disciplines where there are people doing research related to responsible tech-- computer science, information science, communication, science and technology studies, philosophy,

gender studies, psychology, law, political science, just to name some. So when students or others ask me what they should study to "do" tech ethics I often suggest that they should find the people they admire in the space and see what they do and what they've done.

I don't think that there's any correct educational path, and I hope that we continue to have a wonderful melting pot of disciplines working in responsible tech. My own disciplinary background traverses a few of these; I have degrees in psychology, human-computer interaction, law, and

human-centered computing, and now I work as a professor of information science. And through all of those, the connecting thread of my interests and research is that I LOVE technology. I was a teenager in the late nineties, so I grew up without the internet and then got to experience how much it opened up my world. People who study and talk a lot about tech ethics, and by extension, many of the worst aspects of technology, sometimes get cast as one-dimensional critics who hate technology or want to stifle innovation. But I critique because I love. The internet is so amazing and transformative, and I want it to be the best that it can possibly be. So my advice as well is to find the thing you love, and then work to make it better.

What are the biggest hurdles with the Responsible Tech movement right now?

One thing I've been thinking about a lot lately is how ethical technical design requires speculation about possible harms, and why that can be difficult to do. I think one reason is that it's easiest to imagine what harms you might experience yourself. However, technological harms disproportionately impact marginalized groups--the same groups underrepresented in the tech industry. Comments like "that wouldn't bother me" or "I never would have thought of that" point to a problem with both imagination and empathy. This is one reason why more diversity in the tech industry might be so beneficial to the responsible tech movement, but also, we can't put all the burden on the people being harmed to fix things.

What about our society has to change to push for more responsible tech?

I think there are many different answers to this question, but I will offer one. I am not someone who thinks that everyone needs to learn how to code; however, I do think that basic computational literacy is important because we need to

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understand how technology works and how it is acting on us in order to be able to critique it. Consider an example of algorithmic bias; when machine learning seems like magic, it is impossible to understand how biased decisions might be impacting you and where that bias comes from. I think that we've come a long way even in the past five years or so with respect to public awareness of many of these kinds of ethical issues in tech, and that the clear next step beyond this awareness should be understanding, which suggests the important role that education can continue to play. And this doesn't mean just in the classroom--I think there's a huge opportunity for more science communication in the tech space. This is one of the reasons I've been creating content for TikTok!

What bridges are missing across communities, stakeholders, and/or organizations in this space?

As an academic, I often wish that there were more, and more visible, bridges between scholarly work and everyone else--including tech companies, policymakers, and the general public. There are a number of barriers to creating and crossing these bridges, in terms of logistics, legibility, and incentive structures. However, in the tech ethics space, a lot of important research is happening at universities where academics aren't beholden to products, optics, or even relevance some industry researchers are. That said, when not connected to products and platforms, it can also be more challenging for that research to have direct impact, and the research itself is not communicated or even illegible to the public. I think that we will see more bridging happening as, for example, more tech companies directly engage with the academic research community and more academics engage in public scholarship and science communication.

Connect with Casey Fiesler @cfiesler

"I don't think that there's any correct educational path, and I hope that we continue to have a wonderful melting pot of disciplines working in responsible tech."

-Casey Fiesler, Assistant Professor, Information Science, University of Colorado Boulder

Ayca Ariyoruk

Director of Global Partnerships and Communication, Soliya



What are the most pressing and important topics in Responsible Tech?

Culture and conflict. The world was not prepared for the intensity and reach of online connections. We are working our way through global culture shock. In the United States, the culture shock is more noticeable because it is home to such wide diversity. Americans are getting to know each other in new ways, which partly explains the polarization we see today.

Evolution tells us that humans grow their tribes slowly. Before

Facebook, we would need to visit a friend's house to see their photo album, or share a dinner table with their family to discuss politics. We would need to take a plane to make contact with a different culture. All of these physical interactions were preparations for contact with difference. When we are online, we encounter differences fast, pre-trust or with no heads up, in vast quantities. When that happens, neuroscience tells us our brains are likely to sense a threat. That makes us defensive and we are not in a position to activate our 'empathy muscle'; an essential tool for conflict resolution. Conflict

becomes inevitable. As a society, we need to recognize this moment of collective culture shock, understand technology's role in it and tackle it.

Good news is there is a way. We can be reskilled for societies that moved online and acquire new skills for the virtual world. Bad news is that we are off mark on the kinds of skills we need for the digital world. We are under the impression that we only need hard skills in the digital world, as in math and engineering. We haven't yet fully made the connection between the digital world and 'emotional skills' such as empathy. This is a serious problem. The stigma against social and emotional learning, and broadly against social sciences in comparison to hard sciences, is preventing us from incentivizing the right kind of education, and putting money in the kind of investments and entrepreneurs that will help us fix the problem.

What impact is your organization having on the Responsible Tech ecosystem? How is your organization helping to build a better tech future?

Soliya is an international non-profit that has been using (non-commercial) video conferencing technology preparing the rising generations for this cultural shock through social-emotional learning in higher education. For almost two decades, before there was Twitter or Zoom, Soliya started testing and building on the well known social psychology hypothesis that intergroup contact, that is human contact under a controlled environment, can reduce prejudice even in groups that have been historically hostile to one another. We asked the question: Will intergroup contact deliver results if the contact is made online? The results have been promising, as has been referenced by our collaborator late Emile Bruenau, the neuroscientist who

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designed Soliya's evaluations in his most recent publication.

Soliya has connected tens of thousands of young people from over 30 countries in partnerships with over 200 universities and colleges from Middle East, North Africa, Europe, Southeast Asia and North America., In the presence of highly trained cross-cultural facilitators participants discuss some of the most contentious political and social issues of the times. The results showed learning by the participants in communication skills, enhanced confidence, increased knowledge of the world, and indicated positive attitudinal shifts towards people, opinions and practises that are strikingly different from their own.

So yes, Soliya had a head start on thinking about online interactions, conflict and culture. And no, not everyone who clicks up a like on Facebook stands the test of contact hypothesis. There are important conditions to be met for this model to work which are lacking in our social media platforms of today. It is only recently that social media platforms started showing some concern for social responsibility. Apart from that, it has generally been the Wild West.

What are the biggest hurdles with the Responsible Tech movement right now?

European Union as an international organization is at the forefront of pushing for norms and regulations, placing human rights, privacy and data protection at the heart of it with GDPR (General Data Protection Regulation) coming into effect in 2018; and in April of 2021, a regulation proposal on artificial intelligence.

In the United States, the big technology companies make the rules, the government plays catch up. People are asking for change through expressing themselves as consumers and employees, since the government has been somewhat reluctant. Young people want to buy, use and work for products and companies that align with their values. This is a positive innovation in American democracy in my opinion.

China's authoritarian ways and the lack of cooperation and trust between China and the West on other global issues is preventing cooperation on technology even though this could be one topic that could be a fresh start. The West's cultural superiority complex and past century's ideological differences are putting the brakes on such cooperation.

Developing nations are the ones caught in the middle. They are going to be swayed one way or another, unfortunately, may be in a way that is not in the best interest of their people. Here we are anticipating the ethics of the application of advanced technologies, while in some developing countries people are lacking access to the internet to provide for their basic needs in education and healthcare. According to Statista, in 2019, the global online rate was 51.4 percent. They don't have a seat at the table where decisions are being made that have an impact on their lives. That is medieval.

What organizations and/or individuals do you believe are making a large impact with building a better tech future?

Responsible tech as a grassroots movement shows great promise. It is international, and can go global with an extra outreach effort to include more doers and thinkers from China and as well as the developing world.

The United Nations, despite its limitations and urgent need for reform, has a good foundation and network to be a global norm maker. It succeeded in elevating human rights and climate change as a global issue, and it can do the same for technology. There are promising steps on the way, such as the United Nations Secretary-General's Roadmap for Digital Cooperation and the meeting that happened not too long ago at the United Nations Security Council, the first debate at UN's security chambers tackling advanced technologies. This is a significant step in the right direction. When an issue is recognized and linked as a threat to international peace and security, it indicates the world is waking up to a problem, slowly but surely. Similar to that of climate change, we can't deal with challenges around technology in silos, it needs to be a part of sustainable development and; peace and security agenda.

We need initiatives that can help build international consensus around the values that will guide us on the most pressing questions on the future of technology in an equitable way. We need norm making global arrangements and frameworks. We are behind schedule on climate change, we can't be behind on keeping up with technology.

What about our society has to change to push for more responsible tech?

Human competencies versus artificial intelligence. We are heavily invested in understanding AI but are we looking into
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the right place to understand AI? The real black box is the human brain that influences our behaviors and emotions in designed Soliya's evaluations in his most recent publication.

my opinion. If we want to understand the problems in AI, we ought to look in the mirror. The United States recently announced \$1 billion research for AI and quantum computing as a matter of national security. Are we in the direct direction? What values and ethics will guide that research? Will his life be affected? Will there be any social scientists in the project? Those are the questions that point to problem areas in my opinion.

What skills or approaches have most helped you find success in your work?

Curiosity.

What bridges are missing across communities, stakeholders, and/or organizations in this space?

I can tell you the kind of bridges that we notice are missing and affecting Soliya's work. Thankfully, our programs like the Global Circles have had support from the European Commission through Erasmus+ Virtual Exchange that enabled us to expand access to young people in Europe and the South Mediterranean; and currently being supported by Stevens Initiative at the Aspen Institute, which is sponsored by the U.S. Department of State, with funding provided by the U.S. Government. The Stevens Initiative is also supported by the governments of Morocco and the United Arab Emirates. They enable us to provide access to participants in the United States and in the Middle East and North Africa. Cooperation and collaboration among funders and supporters of virtual exchange and interest in a wider geography, could make programs more accessible and more global.

Our programs are meant to build bridges among cultures but those bridges can only go as far as our funders' geographical interests. We need more digital bridges and less digital walls so that we have more meaningful online interactions.

Connect with Ayca Ariyoruk @AycaAriyoruk

"We are under the impression that we only need hard skills in the digital world, as in math and engineering. We haven't yet fully made the connection between the digital world and 'emotional skills' such as empathy. This is a serious problem."

**-Ayca Ariyoruk, Director of Global Partnerships and Communication,
Soliya**

GET TO KNOW

Kavya Pearlman

Founder & CEO of XR Safety Initiative (XRSI)



What are the most pressing and important topics in Responsible Tech?

The short answer is Privacy, Safety, and Trust.

The world is facing the unprecedented challenge of building responsible, safe, and inclusive immersive technologies, Spatial Computing Information, and, in general, Communication Technology ecosystems.

The emerging tech domain is characterized by heterogeneous technologies, which enable

innovation in various areas. The satisfaction of security and privacy requirements plays a fundamental role. Such requirements include data confidentiality and authentication, access control within the network, privacy and trust among users and things, and the enforcement of security and privacy policies.

Traditional measures cannot be directly applied to immersive technologies due to the different standards and communication stacks involved and the magnitude of the reality capture. As the world becomes increasingly

connected, and immersive technologies gain wider adoption both within government and businesses and the consumer market, a framework for security and privacy for these devices is required. From headsets to other wearables and related sensors, Extended Reality (XR) technologies are now capable of gathering untold quantities of biometric data about users, potentially everything from a user's location and skin color to their eye and hand positions at any given time.

The National Institute of Standards and Technology (NIST) offers basic guidance. Regional laws such as General Data Protection Regulations (GDPR), Children's Online Privacy Protection Rule (COPPA), and Family Educational Rights and Privacy Act (FERPA) govern some forms of data in specific locations. Despite the existing guidelines and regional laws, comprehensive protections are not in place to protect individuals and stakeholders in XR and related technologies.

How did YOU pave your career in the Responsible Tech field? What advice would you give to college & grad students looking to be involved in the Responsible Tech ecosystem?

I was born in India, and since I was a child, I have always been inclined to inspect and solve problems. I wanted to become the Deputy Inspector General (DIG), a position truly based on ethics. It was this deep "right from wrong" moral compass that would lead me throughout her career.

I dreamed of coming to the US to have the freedom to do anything and be anyone without the weight of systematic traditions. This happened in 2007 when I moved to Chicago. For five years, I've been working as a hairstylist. One day, I was cutting a gentleman's hair when he discussed his work as a security analyst

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at a bank. He noticed my immense curiosity and desire to learn more. After paying for the cut, he recommended reading "Cyber War" by Richard A. Clarke. A couple chapters in, and I was hooked.

Sometimes intuition is the best guide. The book connected my profound ethical prudence and love for computers into one space. I knew then I wanted to be a cybersecurity officer. I applied to the top cybersecurity Master's programs in the country. DePaul, in Chicago, was at the top of my list, and this was the beginning of a new life.

My story demonstrates that there's no "right" or "wrong" path to be involved in the Responsible Tech ecosystem. What I can suggest to anyone interested in this domain is to "fail forward".

What impact is your organization having on the Responsible Tech ecosystem? How is your org/company helping to build a better tech future?

When I founded the XR Safety Initiative (XRSI) back in 2019, I felt there was an urgency to address the issues that impacted the emerging technologies. The Extended Reality domain will become seamless with our real world in the near future. That's why we have to think now about what could go wrong.

XRSI is the first global effort specifically aimed at creating a trustworthy environment in the immersive technology domain by focusing on a broad spectrum of challenges: policymaking, standards and frameworks development, diversity and inclusion in the industry, Child safety, immersive healthcare, and trustworthy immersive journalism.

Since its foundation, XRSI has worked on many different projects, such as, but not limited to the first Standard Taxonomy for XR, defining the key terms in the domain and laying the ground for a shared research environment in the XR domain. This taxonomy is now being used to inform lawmakers worldwide as they gear up to lay the legal foundation and write laws in XR.

One of the projects I'm proudest of, at the moment, is the XRSI Privacy & Safety Framework for XR and Spatial Computing. As the hardware and software evolve, concern over the user privacy implications is also growing. In 2020, XRSI started releasing its own solution as a "baseline ruleset" to create accountability and trust for Extended Reality solutions while enhancing data privacy and safety for users. The research, development, and release cycle is now continuously happening. XRSI proudly advises several Big tech corporations and contributes to policy and law making for various governments globally, including UK, US, Australia and many more.

What are the biggest hurdles with the Responsible Tech movement right now?

By default, the XR solutions are data mines. These devices and platforms track your gaze, voice, sound, pose, among millions of data points on each human being, wanting to know the psychology of how you perceive things. The developers rarely think about how this will affect human rights, privacy, freedom, and potential psychological impacts on human beings.

Most XR organizations and regulators face what I consider a Collingridge dilemma. "The social consequences of a technology cannot be predicted early in the life of the technology. When change is easy, the need for it cannot be foreseen; when the need for change is apparent, change has become expensive, difficult, and time-consuming."

The dilemma applies to data collection in XR. Information/Data is the heartbeat of XR. Meaningful experiences can only be realized when we use data about an individual for that individual's experience. This inherently means developers need to know information about people and may likely opt for a "more is better" approach. But the concerns for excessive data collection are heightened.

For example, XR devices can lead to inferences such as biometric and gender identity, mental workload, mental health status, cognitive abilities, religious and cultural background, physical health, geographic origin, and many other skills, abilities, personality traits, and more, and this may cause harm to humans. We call this Biometrically-Inferred Data (BID), and it is a largely unregulated area.

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In your opinion, what will the next most problematic issue be in the technology space? How might we anticipate or alleviate it?

The next challenge will arrive a few years from now, but it is already building up.

When all the disruptive technologies that are being developed will converge, the blurring of physical and virtual boundaries will unearth urgent new questions around privacy, safety, democracy, economy, autonomy, and health. More specifically, immersive technologies, strongly empowered by low-latency 5G networks, will mark a crucial step in the spread of XR. All the tracked, stored, and transmitted data will be seamlessly processed by AI-powered neural networks.

Our intimate feelings, behaviors, and judgments may be captured or inferred as data for new uses or misuses. The potential physical, mental and social costs of these risks are too significant to fix them retrospectively. We must be ready to face this convergence. This means we need to have the right technological environment to prevent the worst scenarios. In particular, we need good laws, good culture of trust, and strong awareness to foster the creation of decentralized and responsible self-governance tools. The crucial goal is to avoid ownership and data processing power concentrated in a few giant, profit-oriented companies.

Connect with Kavya Pearlman @KavyaPearlman

"Traditional measures cannot be directly applied to immersive technologies due to the different standards and communication stacks involved and the magnitude of the reality capture. As the world becomes increasingly connected, and immersive technologies gain wider adoption both within government and businesses and the consumer market, a framework for security and privacy for these devices is required."

-Kavya Pearlman, Founder & CEO of XR Safety Initiative

GET TO KNOW

Crystal Grant

Technology Fellow in the Speech, Privacy, and Technology Project at ACLU



How did YOU pave your career in the Responsible Tech field? What advice would you give to college & grad students looking to be involved in the Responsible Tech ecosystem?

It was a winding path for sure. I got my Ph.D. in Genetics and Molecular Biology. While in grad school, I grew frustrated with the inequity in who is included in biomedical research studies leading to tech tools that don't work as well in underrepresented populations. After grad school, I worked in health and tech policy more directly on the Hill and in the non-profit

space. I realized how systemic and far reaching the societal impacts of irresponsible tech could be--for some it would literally be life or death. I knew I liked science/tech but I also had an interest in policy and larger societal issues--I was happy to find a way to marry all my interests. I'd advise any college or grad students looking to be involved in the Responsible Tech ecosystem to find your niche--the field is young enough and the applications of tech varied enough that there's room for everyone. I know that with my background studying human health, that is an application where I especially want

to see tech become more responsible and more equitable. Whatever your interest, there is a need for you (even if the path there isn't clear right now).

What are the biggest hurdles with the Responsible Tech movement right now?

Getting non-technologists to understand the gravity of the situation. I spoke to a friend recently and was complaining about how <insert giant tech company with little regard for consumer privacy here> collects data on everything about you to better tailor your ads. She said she saw no issue with this--her ads were for products she wanted after all. I then brought up something she hadn't considered; that company had also done this to target predatory ads to the poor, diverting quality housing and jobs from them. She then recognized what I meant, and apologized for her privilege. Because it didn't feel like an issue for her, she thought it wasn't an issue for anyone.

This is how this conversation plays out with each person I speak with who is not immersed in the field of Responsible Tech--they hadn't considered how others experience the tech they use and who these products could be hurting. Many people don't think outside of their individual interactions with tech to consider that these may not be indicative of how others are interacting with it. This is by design. And we only have so much time to act to inject responsibility into these tools before it feels like we can't make changes because 'things are how they've always been.' The move fast and break things mentality has broken a lot that now needs fixing, it's a matter of getting a wider audience to see that.

What organizations and/or individuals do you believe are making a large impact with building a better tech future?

Data4BlackLives constantly pushes my thinking on the future of tech while being

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prealistic about tech’s tendency to exploit and perpetuate harm. While many people are still of the mindset that tech *right now* is the issue. It’s not diverse enough. It’s not explainable enough. It’s not transparent enough. We’re not conducting enough impact assessments. Etc. And if we just fix these minor things, we can continue to throw “tech” at large scale, societal issues and expect it to solve them for us. Data4BlackLives has taught me that tech cannot and should not be used in larger societal applications. Especially around the continued criminalization of Blackness. Through their #NoMoreDataWeapons campaign, Data4BlackLives has made it clear that inherent in tech’s use of data is a historical lack of equity.

All data about large societal issues that exists reflect deep-seated inequities whether from over-policing of Black people, the criminalization of poverty, white supremacy in education and housing policies leading to lack of generational wealth, the exclusion of POC from certain professional fields, misogyny--it goes on. Tech will not be able to fix societal issues using that data, it can only regurgitate them. It appears that mass data collection, whether it is intended to or not, often leads to the perpetuation of inequity and to exploitation of those not in power.

It’s not that tech *right now* is the issue, it’s that until we create a more equitable, just society, tech at its best will be used to uphold the status quo.

"After grad school, I worked in health and tech policy more directly on the Hill and in the non-profit space. I realized how systemic and far reaching the societal impacts of irresponsible tech could be--for some it would literally be life or death."

-Crystal Grant, Technology Fellow in the Speech, Privacy, and Technology Project at ACLU

Sam Brown

Co-founder of Consequential



How did YOU pave your career in the Responsible Tech field? What advice would you give to college & grad students looking to be involved in the Responsible Tech ecosystem?

There are so many different ways you can affect change. Know what kind of change you want to create, what levers are most useful for doing so, and where your skills and personality are the best fit. Do you want radical change? Focus on working with activist organisations and spaces, or building a platform where you pull the narrative more towards your view. Do you want to

create systemic change? Focus on building experiences in all angles of the system so you can connect them and bridge them. Do you want to create practical and tangible change within business or tech structures? Focus on understanding how business and tech work, what language resonates, and how you can adapt existing structures towards the change you want to see. In my career, I've done all of these things and constantly wander between different worlds and theories of change, stitching together strategies for effective interventions in different contexts along the way. My biggest piece of

advice to anyone looking to be involved in the responsible tech ecosystem is to take the long view - your first job, or even second, third or fourth - might not be exactly where you want it to be, but if you have a clear understanding of the change you're supporting and a goal of learning, then every experience will be valuable.

What impact is your company having on the Responsible Tech ecosystem?

My business, Consequential, does both what we call big 'I' and little 'i' innovation to change the existing business and tech ecosystem. Big 'I' innovation is our focus on large-scale systems change - supporting movements like Responsible Tech, Stakeholder Capitalism, B Corp, Zebras Unite, Doughnut Economics and more that are calling for a more responsible way of creating and running businesses and tech systems that have positive impact on people and planet. We critically challenge the norm - disruption, but for the common good.

Little 'i' innovation is our focus on interwoven strategy and governance, culture and change within individual organisations to help them build their businesses and products in more responsible and resilient ways.

At Consequential, we have 5 values we want to see underpin the future of tech product development, and we focus on creating practices that support those values so they are visible and tangible within organisations. Designing responsible practices began while at Doteveryone - a responsible technology think tank based in the UK - where I created an agile responsible innovation practice called Consequence Scanning; a dedicated time and process for teams to think about the consequences of their products and features.

What are the biggest hurdles with the Responsible Tech movement right now?

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As Consequential I recently did research with the Open Data Institute around tech and data ethics tools and their impact. We were incredibly fortunate to have gotten the time and support of many in the responsible tech movement, as well as to hear from people across the tech ecosystem. The recurring themes and challenges we heard from people with many different vantage points were: without systemic drivers, change can only go so far and so deep; not everyone has the power or agency to engage with responsible technology right now; many responsible tech champions are tired and disillusioned, they need hope and visible momentum to keep going; discoverability of responsible tech approaches is based on personal recommendations and there is little support for wayfinding based on roles and responsibilities; there are not enough bridges between narratives and communities in the space; and there is a fear of being a first mover - if they get it wrong they don't want the scrutiny and blowback.

These are big challenges, but there are many opportunities within these challenges as well. The responsible tech movement is fortunate to have a history and to have other movements it can connect with and learn from and build and grow alongside.

What organizations and/or individuals do you believe are making a large impact with building a better tech future?

I know this Responsible Tech Guide acknowledges many of the visible organizations and people having an impact. I'd like to acknowledge the invisible people who are showing up every day, doing their jobs, and taking on board the lessons and thinking of people in the responsible tech ecosystem. The people who are being responsible in their work and making our vision a reality.

What about our society has to change to push for more responsible tech?

The short answer is 'quite a lot'. Right now, there are converging crises in many areas of how our world works. People are either actively suffering, or have a generalised anxiety that all is not right and we're headed towards a darker future. At the root of many of these crises is the reality that people are disempowered, and don't have enough opportunities to directly feed into the forces that are shaping their lives. Policy, capital, and innovation are happening in concentrated areas and ecosystems that the vast majority of people don't have access to, let alone power over. As long as there is an incredible divide and disconnect between the public services and spaces people can access everyday, and the policy, capital, and innovation that create the structures they live in, responsible tech will be making changes in the margins. The real question is how do we change the spaces where innovation happens, how do we change how policy gets made in a way that genuinely involves citizens, and how do we ensure that capital is distributed to the public services and spaces that can facilitate these first two things?

In your opinion, what will the next most problematic issue be in the technology space? How might we anticipate or alleviate it?

The cost of research and development in emerging technologies and the infrastructure that is needed to support it is astronomical. So long as this is the case, it will be hard to allow new people to enter the field and for new ideas to emerge. This will require intentional investment in ensuring there are ways for new people to participate in creating technology and in bringing it to the world.

What skills or approaches have most helped you find success in your work?

The skill that has most helped me find success is listening. Being able to really listen to what people want, need, and hope helps to build relationships. Listening is the start to solving the real problems and challenges that someone is facing, rather than assuming you know what the problems are or bringing your own prescriptive solution into a new context. Real listening means asking questions that lead to discovery, testing potential insights, and where needed providing a benevolent challenge to blindspots along the way. Listening is where responsible tech can begin and end to ensure it's addressing the real problems facing the world and communities within it.

Connect with Sam Brown @samcatbrown
Check out the [Consequence Scanning](#) resource

GET TO KNOW

Afua Bruce

Chief Program Officer at DataKind*



What are the most pressing and important topics in Responsible Tech?

What are the most pressing and important topics in Responsible Tech?

One of the most pressing topics in responsible tech today is ensuring that it is an inclusive field. This means both allowing people of different races and genders into the space to be researchers, practitioners, and respected technical experts, and ensuring that the technology developed accounts for and respects the beauty of diversity. It is important to have conversations about a lack of

diversity and misdirected technology, but it is also important to create spaces where people of different backgrounds can do their work and thrive. Another challenge facing responsible tech is developing ways for responsible tech to be implemented in all sectors; the non-profit, academic, government, and private sectors must all identify ways to intentionally develop and deploy tech responsibly. Finally, a healthy balance between society, regulation, policy, and innovation in technology must be struck. Responsible tech needs translators who can communicate and

and advocate in multiple environments to create a world where technology helps solve the most complicated problems while balancing some of the strongest parts of society.

How did YOU pave your career in the Responsible Tech field? What advice would you give to college & grad students looking to be involved in the Responsible Tech ecosystem?

I started my career as a software engineer at IBM. After attending grad school at the University of Michigan's Ross School of Business, I decided to take an internal consulting position at the FBI. Initially I saw it as an opportunity to explore for a limited time, but after a year, I realized I truly enjoyed government service. Since then, I've worked at other public interest organizations -- the White House, a think tank, and a non-profit.

At the start of my career, I didn't envision myself in the position I currently hold; I have focused on trying to find jobs that match my interests and skills at particular times. My advice to students looking to be involved in the Responsible Tech ecosystem is to focus less on a long-term career vision for yourself and to focus more on building products and policies that can have an impact. Be willing to learn from people different from you -- culturally and professionally. Recognize that just because something is difficult or takes a while does not mean it's not for you. And finally, there are many ways you can contribute to responsible tech; allow yourself the freedom to responsibly explore different spaces.

What impact is your organization having on the Responsible Tech ecosystem?

DataKind works with pro-bono data science experts around the world to develop data science and AI solutions for

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social sector organizations. We are helping organizations improve their internal operations so they can save money, serve more people, and reduce errors. In addition to partnering with social sector organizations, DataKind also seeks to support the broader Data Science for Social Impact field. Shortly after I joined DataKind, we launched our Center of Excellence, a cross-discipline team of experts committed to training and transparently sharing our processes and resources for anyone to use to advance the social sector. We've published articles on scoping projects and have delivered workshops on our data science project management process. DataKind's UK chapter published a Practitioner's Guide to Data Ethics in July 2021. And we share case studies of select projects so those interested can learn from both what we did and how we did it.

What are the biggest hurdles with the Responsible Tech movement right now?

One of the biggest hurdles is defining "responsible technology," and relatedly what the work includes. While I don't know that there will ever be an exhaustive list of what is considered responsible tech, the definition needs to be clear enough that simply working on something "for good" isn't automatically assumed to be responsible tech. The methods used and the impact of the tech matter just as much as the subject area or complexity of technology.

What organizations and/or individuals do you believe are making a large impact with building a better tech future?

There are so many folks doing great work! I can't list them all here. Some organizations: DataKind & New America (my current and former employers), Code for Science and Society, UCLA's Center for Critical Internet Inquiry. Some specific individuals: Mutale Nkonde, Isaac Addae, Kathy Pham, Meredith Broussard, and Sasha Costanza-Chok.

What about our society has to change to push for more responsible tech?

One of the biggest innovations to be made in society to enable more responsible tech is figuring out business and organizational models that allow this work to be sustainable -- both in terms of funding for practitioners and ensuring the longevity of developed tools and solutions. Without this structure, the field will suffer from burned-out practitioners and fractured or unsupported tools that struggle to have sustained impact over time.

In your opinion, what will the next most problematic issue be in the technology space? How might we anticipate or alleviate it?

As data science, machine learning, and artificial intelligence are more widely used, we must figure out how to do a better job of auditing the underlying algorithms, as well as how to explain the algorithms and decision making to non-technical audiences. Other technologists should be able to understand the assumptions and decision-making of responsible tech, but society must also be able to understand the impact of responsible tech on their lives and access to resources.

What skills or approaches have most helped you find success in your work?

I've found that success can come from strong partnerships. While I have my own area of expertise, I recognize and seek out people who are smarter than me in other areas to see what I can learn from them and what we can create together. There's so much work to be done in responsible tech and it's an honor to both have my own role in the space and to work with many wonderful people.

Connect with Afua Bruce @afua_bruce

Afua Bruce has changed roles since this interview was conducted.

GET TO KNOW

David Jay

Head of Mobilization, Center for Humane Technology*



What are the most pressing and important topics in Responsible Tech?

We are sitting at a profound moment of opportunity: as the world rejects mainstream social media platforms for the harms that they cause we need to articulate a clear, believable vision for a different way that technology can add value to people's lives at scale. We've shown why exploitative technology fails, now it's critically important that we prove how humane technology can succeed.

How did YOU pave your career in

the Responsible Tech field? What advice would you give to college & grad students looking to be involved in the Responsible Tech ecosystem?

I have had a career at the intersection of technology and community organizing, exploring how the technology we build can support deep relationships that build power. I spent years working on vaguely aligned projects before I got an opportunity to work with the Center for Humane Technology. My advice is: develop a skill that's transactional and a skill that's transformative. Have something .

that it's straightforward to get hired to do (UX, development, marketing) and a skill that helps you transform the organizations you're part of for the better once you're in (community organizing, systems thinking, racial justice education.) Responsible Tech is shaped by those who know how to get in, shape change, and pave the way for more people to come in after them.

What impact is your organization having on the Responsible Tech ecosystem?

The Center for Humane Technology works to reframe the insidious effects of persuasive technology, expose the runaway systems beneath, and deepen the capacity of everyday leaders and global decision-makers to take wise action.

We accomplish this by working to shape public discourse on tech reform through the film *The Social Dilemma* and our podcast *Your Undivided Attention*. We also offer a free online course for technologists, *Foundations of Humane Technology*, and actively work with large platforms, lawmakers, and tech reform organizations to facilitate a transition towards humane technology.

What are the biggest hurdles with the Responsible Tech movement right now?

We lack capital.

There is a growing movement of brilliant technologists eager to build humane technology and a long history of people who have been building it in the margins with deep expertise to offer. But we lack a clear story, backed up by compelling evidence, about why humane technology will be more effective at changing people's lives than the status quo. That narrative doesn't need to appeal to VCs focused on exponential growth, but it needs to be able to appeal to some group of people who can make sure that

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responsible technology has the resources it needs to be successful.

What organizations and/or individuals do you believe are making a large impact with building a better tech future?

New_Public, the Algorithmic Justice League, FairPlay, Accountable Tech, Exposure Labs, Reset Tech, and Headstream Accelerator.

What about our society has to change to push for more responsible tech?

We need a stronger youth led movement pushing for regulatory reform of the tech industry, a Sunrise Movement for Tech. Log Off Movement and Lookup.live are a great start.

In your opinion, what will the next most problematic issue be in the technology space? How might we anticipate or alleviate it?

The mental health of social media creators.

Social media influencer is the fastest growing category of small businesses in the US, and the 4th highest career aspiration of elementary school students. Influencers, even successful ones, face significant economic instability and many face severe mental health problems tied to their work. This is not only a growing public health and economic justice issue, it's one that will increasingly define our cultural and political discourse as people who are heavily amplified by algorithms dominate both.

What skills or approaches have most helped you find success in your work?

It's critical to move at the speed of trust. Focus on relationship building first, share personal stories and identify shared values, then get to the work of figuring out what to do together. Humane technology ultimately emerges not from the code we write but from the relationships we build, so I invest heavily in building relationships and creating spaces where others can do the same.

What bridges are missing across communities, stakeholders, and/or organizations in this space?

Technology has the power to build or diminish our capacity to face every other problem that matters: from racial justice to climate justice, from preserving democracy to addressing the pandemic. As humane technologists it's not just our job to build better technology, we need to show up to the places where communities are grappling with critical challenges and improve their capacity to do so. We need to be a community that thrives at intersections with other movements.

Connect with David Jay @davidgljay and the Center for Humane Technology @HumaneTech_

**David Jay has changed roles since this interview was conducted.*

"Responsible Tech is shaped by those who know how to get in, shape change, and pave the way for more people to come in after them."

-David Jay, [Formerly] Head of Mobilization, Center for Humane Technology

Dr. Murtaza Shaikh

Online Hate & Terrorism Lead at Ofcom, and Advisor to UN Special Rapporteur on Minority Issues



What are the most pressing and important topics in Responsible Tech?

I am biased, but I think online hate speech poses an incredibly challenging and complex societal problem that in the context of social media platforms is global and cross-cultural. It is distinct from other online harms as its precise definition continues to be contested and highly dependent on context. It takes place on public channels and will always take place at incredible scale. We may improve tech/human hybrid solutions, but when it is mixed with

far-right violent extremism, disinformation and violent conspiracy theories, the result is a concoction that poses a real threat to the fabric of societies, risks animosity towards minorities and increases levels of real-world violence.

How did YOU pave your career in the Responsible Tech field?

I saw and realised that my expertise in international human rights law and conflict prevention relating to decreasing religious hatred and countering extremism was far more relevant and meaningful in the online context. Advocating for changes to

laws and policies was a slower and more difficult process, which comparably had less societal impact. So I sought to apply my legal, policy and international relations knowledge to online content policies and moderation.

I worked with the late Jo Cox MP, who was murdered by a far-right extremist radicalised through online channels. Societal divisions and toxic campaigning for the UK to leave the EU also contributed to this. Soon after in 2016, when I gave oral evidence to the UK Home Affairs Select Committee on Islamophobic hate speech on a number of social media platforms, it dawned on me the huge potential benefit that could result from such tech companies' exerting sincere efforts at improvement that went beyond reputational or commercial concerns.

What impact is your organization having on the Responsible Tech ecosystem?

Ofcom is one of the first national regulators to take on the task of ensuring online safety for UK online users. It has just begun to do this in relation to UK-established video sharing platforms with incitement to hatred expressly within its scope. This role will expand to all user-generated content hosting and search services under the Online Safety Bill, once passed. It will seek to protect online users from illegal and harmful content.

Prior to joining Ofcom, I helped draft 'Effective Guidelines on Hate Speech, Social Media and Minorities' for the UN Special Rapporteur on Minority Issues. Once published, it is hoped that it will provide a blueprint for the application of international human rights standards to how social media companies can practically ensure better online safety for minorities and other protected groups. The resort to social media channels in inciting ethnic violence in Myanmar and Sri Lanka and associated failures should never be allowed to repeat.

GET TO KNOW

Cristina Martínez Pinto

Founder & CEO, at PIT Policy Lab



What are the most pressing and important topics in Responsible Tech?

Out of the complexity of the COVID pandemic, the urge for a transformation and transition to a digital society became a top priority, as did the need for decision makers, policy practitioners, and politicians to deepen their understanding of responsible use of digital technologies as enablers for economic recovery, and as a tool to respond to shared social challenges.

How did YOU pave your career in the Responsible Tech field? What

advice would you give to college & grad students looking to be involved in the Responsible Tech ecosystem?

Back in 2015, as someone with a background in social sciences, I had an interest in technology but did not know the public interest tech and responsible tech fields. My first approach to the ecosystem happened when I was studying my Masters in Washington DC and I learned from an event on Data for Social Good organized by the Beek Center for Social Impact and Innovation. From there, I connected the dots between technology, ethics, and policy and decided to pursue a professional

career in these fields. My advice to students, regardless of their major, would be to attend networking events, to get involved in projects and with organizations working in PIT and responsible tech, to gain experience and decide whether this is a career path you also wish to pursue!

What impact is your organization having on the Responsible Tech ecosystem?

We at the PIT Policy Lab are working at the intersection of Public Interest Technology and agile policymaking with a focus in Mexico and Latin America. We are aiming to build the PIT field regionally, and to do so from a DEI (Diversity, Equity and Inclusion) angle. We are helping to build a better tech future by building bridges across sectors, developing tech policy recommendations and proofs of concept not only centered on people but conscious of the need to embed ethical and Human Rights perspectives on the technology life-cycle.

What are the biggest hurdles with the Responsible Tech movement right now?

I believe one of the biggest challenges that the movement is facing is that most practitioners pursuing careers in the field are doing so in the United States and to a lesser extent in Europe. That usually leaves us (Latin Americans) out of the conversations and excluded from opportunities to explore the field professionally. So there is a need to contextualize the tools offered by the movement to other regions and countries, as well as to open opportunities to different geographies.

What organizations and/or individuals do you believe are making a large impact with building a better tech future?

Organizations like the World Economic Forum are doing an important job by

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igniting cross-sectoral conversations on how to build a better tech future. For instance, WEF's Responsible Tech Working Group is identifying best practices from the private sector to operationalize ethical principles into real-world scenarios. At the local and regional levels (Latam), organizations like the IDB Lab, C Minds and Puentech are focusing on developing actionable research and policy recommendations based on the responsible development and implementation of emerging technologies.

What skills or approaches have most helped you find success in your work?

As someone with a major in International Relations, I have always been fascinated by and respectful of other cultures - I think cross-cultural understanding has allowed me to work successfully in international settings. I firmly believe that core skills like influential communication, complex-problem solving, and teamwork, among others, are key to succeed in the field.

What bridges are missing across communities, stakeholders, and/or organizations in this space?

Exactly the kind of bridges we have been working to develop - getting representatives from different sectors a seat and a voice at the table. There is a need to recognize the value and expertise that each group brings to the table, including the communities we design policies or technology solutions for.

Connect Cristina Martínez Pinto @pintomar43 and PIT Policy Lab @pitpolicy

"I believe one of the biggest challenges that the movement is facing is that most practitioners pursuing careers in the field are doing so in the United States and to a lesser extent in Europe. That usually leaves us (Latin Americans) out of the conversations and excluded from opportunities to explore the field professionally."

-Cristina Martínez Pinto, Founder & CEO, at PIT Policy Lab

GET TO KNOW

Caryn Tan

Responsible AI strategist and lecturer



What are the most pressing and important topics in Responsible Tech?

People are really excited by tech and building tech. Tech is super exciting but not designing it well can lead to vast societal implications that are negative. I think one of the most important topics in responsible tech is ensuring we are thinking about how we equip people with the tools and know how to work in this space. How are we training people in university when they study computer science? How are we training our early talent in graduate

programs? How are people who lead teams thinking about what good tech looks like?

How did YOU pave your career in the Responsible Tech field? What advice would you give to college & grad students looking to be involved in the Responsible Tech ecosystem?

I have always been interested in multiple disciplines and have consciously selected learnings to build a leadership and managerial toolkit. Visiting Silicon Valley during my Masters in 2015 showed me the importance of analytics so networked my way into the digital analytics

practice in Accenture. In 2017, I saw that law and ethics was becoming important so I studied a part-time law degree. At that time Accenture was building a responsible AI practice led by Rumman Chowdhury.

In 2018, I joined forces as her sidekick and did all things strategy and operations. I looked after our fairness tool product, led client conversations, did internal and external business development, trained and developed new members of our team and got to know the needs of the academic, industry and policy community around this topic. Most importantly, I stayed ever curious. I eventually grew the remote team of interdisciplinary legal/policy/data science/strategy practitioners from 5 to over 50. I translated what I learnt into experiential learnings for my students. As an adjunct, I head up Ada National College's data and AI apprenticeships working very closely with the dean. I designed and taught their 3rd year BSc courses accredited through Open University. I was a core member in shaping the MSc in Responsible Data Science across law/computer science faculties at the University of Birmingham led by Professor Karen Yeung. It is the first ever responsible data science masters in the world. I am also the programme lead for Alan Turing Institute and Accenture's academic partnership.

What impact is your company having on the Responsible Tech ecosystem?

We built one of the first tools to quantify fairness in algorithms. We then talked about its importance and trained both internal teams and external stakeholders on this topic. We plugged ourselves right into the ecosystem by engaging industry, NGO, academia, and government / regulators to inform policy, shape standards, provide advice and share knowledge. Accenture is a 500k people organisation, the training I developed and led has been rolled out across the

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all tech is
human

entire organisation. This means that anyone working for Accenture at one of awareness of the importance of responsible tech in their work. I hope this means there is a slow trickle on effect across the industry.

What skills or approaches have most helped you find success in your work?

I would bucket it into three areas of mindset, human competencies and domain expertise:

- Mindset: being ever curious in the world, having a genuine interest in having impact in society through the areas that are accessible to me. This means combining all the knowledge I have acquired and continue to learn and putting that to use in the responsible tech space.

Concrete examples:

#1 I saw the responsible tech space becoming important so I thought to myself, "how can I skill up to add value?"

#2 I saw that others were facing the same challenges I was facing so I found a way to productise my knowledge by creating handbooks and learning products so I could easily share it with others in a scalable way .

- Human competencies: knowing that the learning journey is not a solo one. Seeking mentors and experts who have been there before to guide me on my way, finding peers and buddies who are going on the same learning journey as me to hold me accountable and to create a community of belonging and purpose

- Domain expertise: understanding what key skills are needed in the space which is not out of reach for me to learn and put to use. I picked up strategy, project management, law, basic coding in python including data analysis and machine learning

Connect with Caryn Tan @CarynTan29

"I think one of the most important topics in responsible tech is ensuring we are thinking about how we equip people with the tools and know how to work in this space. How are we training people in university when they study computer science? How are we training our early talent in graduate programs? How are people who lead teams thinking about what good tech looks like?"

-Caryn Tan, Responsible AI strategist and lecturer

Tania Duarte

Co-Founder, We and AI



How did YOU pave your career in the Responsible Tech field? What advice would you give to college & grad students looking to be involved in the Responsible Tech ecosystem?

I have been in businesses and marketing management and consultancy for decades, so I don't have a background as a technologist, engineer or ethicist or academic. I also don't have qualifications beyond an exec MBA from the turn of the century, and a diploma in Digital Business Leadership.

The perspective my experience gives me is that for tech development and implementation to be responsible and sustainable, everyone in the organisation needs to be involved in uncovering and addressing the role, impact and potential that innovation has on stakeholders. Therefore, I see expertise in bringing about mindset change across the business, and how to balance innovation and commercial imperatives with long term business sustainability and stakeholder relationships, as vital to the responsible tech field. It is key that more people have an understanding how to operationalise tech ethics frameworks, and address cultural and

commercial barriers to becoming more robust and impact lead organisations at a systemic level.

So my advice is specifically to encourage more business students to look at joining responsible tech communities and take on these challenges, but also for tech and ethics students to build their networks outside of purely tech or diversity fields. Meet people in all roles within organisations and see what opportunities there are to support other functions. Network in tech ethics communities, but also outside of them.

What impact is your organization having on the Responsible Tech ecosystem?

We and AI is a UK volunteer lead charitable organisation which welcomes volunteers from all fields. We address the inadequate representation of the diversity of the UK population in the design, build, implementation or deployment of AI. Our approach is to engage and empower more people, and particularly those from under-represented and marginalised communities, to get involved in holding AI to account and making it work for them.

The three main activities to achieve this are:

1. Providing free education about what AI really is, and the role it plays in society. We do this in a way that is truly accessible, useful and relevant for people with any level of education, and with any level of exposure to technology.
2. Delivering this education to cohorts of community champions from different and diverse communities, (such as educational, grassroots communities or business networks). We then work with champions to increase the awareness of the risks and rewards of technology specifically for their communities.

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3. Building open source resources libraries so our champions (and anyone online) can tailor relevant and accessible material for their particular communities. This involves curating, summarising, and filtering resources - such as research, articles and case studies in a variety of different media. We have an early stage beta of information (for communities impacted by racism) here <https://weandai.org/race-and-ai-toolkit>, and have plans for other topics. A key element is signposting a range of further actions people can take to get involved, linking up with other projects.

What about our society has to change to push for more responsible tech?

We believe people need to have a greater understanding of their rights, responsibilities and tradeoffs as AI stakeholders. In order to make sure technologies work for everyone in society, the whole of society needs to be equipped and motivated to be involved. There needs to be investment in not just increasing AI skills, but AI and data literacy.

This doesn't absolve organisations and governments from needing to take a lead on responsible tech. However, if more people, and from a greater diversity of backgrounds are involved in shaping AI, then there is more chance of technology being more beneficial and equitable for all sections of society. Tech which works for everyone cannot just be made by or for those who currently have the most power or representation in its development, governance and use.

Instead, the general public, including those who work in or with tech need to be more confident in questioning and identifying uses of AI, and more informed about the consumer, democratic, career and influencing options they have to get involved in shaping AI.

Currently, there are many misconceptions among the general public around AI, and much fear which impedes engagement and trust. We are working on a joint project called Better Images of AI <https://blog.betterimagesofai.org/> which reimagines the visual images used to portray AI in media, websites, corporate material. These are currently unrepresentative and non inclusive, filled with white, male robots, blue backgrounds and glowing brains, which distort our relationship with technology. Join us!

Connect with Tania Duarte @tanduarte

"So my advice is specifically to encourage more business students to look at joining responsible tech communities and take on these challenges, but also for tech and ethics students to build their networks outside of purely tech or diversity fields. Meet people in all roles within organisations and see what opportunities there are to support other functions. Network in tech ethics communities, but also outside of them."

-Tania Duarte, Co-Founder, We and AI

Andreen Soley

Interim Co-Director, Public Interest Technology, New America



What are the most pressing and important topics in Responsible Tech?

Responsible technology is essentially an interdisciplinary endeavor because it is important to understand that technology has values embedded within its design. That awareness usually comes from recognizing the social and political context of the society in which a technology is designed. So, the notion that technology is simply a tool with no values is one of the most important things people need to understand.

Development and creation of career pathways within responsible tech is essential to growing the field. There should be opportunities for students to find internships and opportunities for them to see the applications of their knowledge outside the classroom.

How the field understands and conceives of justice and equity should be clearly delineated and defined, rather than rely on a passive interpretation of 'responsible'.

How did YOU pave your career in the Responsible Tech field? What advice would you give to college & grad

students looking to be involved in the Responsible Tech ecosystem?

I came to this work through my desire to better understand how people understood themselves and their world. That led me to pursue degrees in psychology, communications, and education. I landed in this space as a result of my interest in creating educational programs for students, so when I came upon the opportunity to make technology education more accessible, it was the culmination of many of my long held passions.

My advice to students is to start within the community in which you live or go to school. Begin with a volunteer experience that explores what interests you about technology and use that as an opportunity to identify individuals who are doing work that you would like to do. Identify a faculty member whose work you admire or makes you curious and do an informational interview. Also, social media makes it so much easier to gain direct access to the works of brilliant scholars and responsible technology pioneers. Find them, follow them, and read their works.

What impact is your organization having on the Responsible Tech ecosystem?

The Public Interest Technology University Network (PIT-UN) is currently composed of 43 colleges and universities helping to define and develop the public interest technology ecosystem within academia. Through the creation of courses and other educational programming, PIT-UN is offering career pathway models for practitioners-in-training and supporting faculty in their efforts to build responsible technology, what we call public interest technology, as an academic discipline. Since its inception in 2019, PIT-UN has distributed over \$7.8 million through its annual grants program to support 69

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projects focused on creating interdisciplinary coursework; developing fellowships, students technology clinics and internships; building educational infrastructure to reward early career faculty doing research and teaching; and exploring ways to nurture the growth of cross-institutional collaborations.

What are the biggest hurdles with the Responsible Tech movement right now?

Technology is often brought to market without deep consideration of its negative or harmful impact on individuals and communities. Educational programs struggle to offer an ethical framework to help technologists understand the impact of their innovations because faculty lack the ethical training to weave these questions in their coursework, particularly in highly technical courses. One quick fix is to suggest that diversifying the tech pipeline in itself will inevitably yield a better and more responsible technology ecosystem. However, systemic inequalities in technology design and delivery cannot be redressed by a more diverse set of people alone, particularly if they are inculcated within an unchanging educational landscape. Therefore, a cultural shift is needed, particularly within the incentive structures of the technology workforce. How do we reward individuals who pursue the common good? How do we develop technology that responds to and centers the needs of communities?

PIT-UN has found that even if educational programs ensure that students have a better understanding of their professional and ethical responsibilities as technologists, they may then enter workplaces that offer little models for deploying their ethical training in the design and development of technology. Thus, we need better alignment between teaching ethical design and its practice out in the world.

What organizations and/or individuals do you believe are making a large impact with building a better tech future?

There are several academic organizations within PIT-UN that are seeking to have an impact: Public Interest Tech Lab at Harvard, Center for Responsible AI (NYU), PIDLit (Georgia State), Center for Critical Race and Digital Studies (NYU), Data Science for Social Good (CMU), Ethics, Society, and Technology Hub (Stanford), Cleveland State University TECH HUB, Sewanee DataLab, among others.

Other Organizations: DataKind, #BlackTechFutures Research Institute, Coding it Forward, Partnership for Public Service, AnitaB, OpenAI, New Public, NAVA, Public Digital, Beeck Center, Algorithmic Justice League, Center for Black Innovation, BlackInData, Civila, Impactful, The Edtech Equity Project, Aspen Policy Hub, and Center For Humane Technology just to name a few.

What about our society has to change to push for more responsible tech?

Incentive structures must change to support responsible technology rather than merely suggest that it be done simply because it is the right thing to do. Budgets must reflect a commitment to centering equity and justice within this burgeoning ecosystem. Educational institutions must be supported to build out the infrastructure to support the type of educational programming that will develop the skills and knowledge of students and faculty who want to work and study within this space. Students must have scholarships and financial support to pursue responsible tech and faculty must be rewarded for their research and teaching. Viable career pathways must be made clear to all who wish to pursue it through clearly defined jobs and roles.

In your opinion, what will the next most problematic issue be in the technology space? How might we anticipate or alleviate it?

The enduring digital divide will continue to erode whatever promise responsible technology believes may be possible. Lack of access to inexpensive and robust internet will make opportunities for full participation a problem for our most vulnerable and marginalized communities. But the most important challenge is to see ourselves as responsible for how technology is deployed in our culture and society and being willing to admit its limitations and capacity. We have to avoid encouraging a sense of inevitability in technological innovation and create avenues for communities and individuals to redress harms when they arise. That's part of the power of centering people and their needs in this work.

What skills or approaches have most helped you find success in your work?

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A willingness to continue to learn and be responsive to the lessons of those with whom I hope to partner. It's been important to decenter my own experiences and listen to the individuals who are doing the labor to build out educational programs for themselves and others.

What bridges are missing across communities, stakeholders, and/or organizations in this space?

Bridges need to be built between tech companies, governments and organizations in order to better align on values and incentives that will advance the field. It's important to create opportunities for different sectors to learn from each other. It's not enough to say we need to work together, individuals need to be paid to create these connective tissues as part of this ecosystem.

"[T]he most important challenge is to see ourselves as responsible for how technology is deployed in our culture and society and being willing to admit its limitations and capacity. We have to avoid encouraging a sense of inevitability in technological innovation and create avenues for communities and individuals to redress harms when they arise. That's part of the power of centering people and their needs in this work."

**-Andreen Soley, Interim Co-Director, Public Interest Technology,
New America**

Tulsee Doshi

Product Lead - ML Fairness and Responsible AI, Google



What are the most pressing and important topics in Responsible Tech?

The pressing and important topics in Responsible Tech can be split into a few critical but related concepts.

1) Promoting a diverse and respectful workforce across the tech industry. Building responsible tech means building tech for everyone -- and this is only going to be possible if we foster an environment in which everyone, and especially individuals with diverse perspectives and voices,

has a seat at the table.

2) Embedding notions of Responsible Tech into product culture. As a product practitioner, much of my focus is on how to build products that are inclusive, safe, privacy-preserving, and ethical. Research insights drive much of this work, but often need to be modified to work practically within the product context. The more we equip our product leads across the industry with meaningful incentives and resources, the more we will see attempts to put research into practice that we will learn from, and that will meaningfully shape

precedent and culture.

How did you pave your career in the Responsible Tech field? What advice would you give to college & grad students looking to be involved in the Responsible Tech ecosystem?

For me, the critical realization was that every product has the opportunity to be a role in Responsible Tech. I began my career as a product manager on Google Search and YouTube. While at YouTube, I identified opportunities to prioritize inclusion in the product experience. This was not a Responsible Tech specific role, but was a role focused on bringing Responsible AI principles to an existing product that effects billions of users worldwide.

To college & grad students who want to become more involved in Responsible Tech: continue to read, ask critical questions, and seek perspectives you haven't heard from before. Find the opportunities to prioritize responsible innovation and bring in novel voices in the projects, internships, and work that you are doing. The biggest way to pave your career in Responsible Tech is to lead by example -- to build tech that champions inclusion, privacy, safety, and transparency.

What impact is your company having on the Responsible Tech ecosystem? How is your company helping to build a better tech future?

As a leader in the AI field, it's also important for Google to be a leader in the field of Responsible AI and Responsible Tech more broadly. While I believe we are making significant strides, we still are continuing to learn, and have a meaningful road of growth and impact ahead.

Google has created a set of AI Principles that we are using to drive governance of our products and operationalization of

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product resources and execution. We want to ensure we drive meaningful research to build critical sociotechnical understanding, embed this understanding into our products, and then share our learnings, especially via tools and resources for the Tensorflow Developer Community.

What are the biggest hurdles with the Responsible Tech movement right now?

I think one of the biggest hurdles with the movement is the belief that Responsible Tech is a feature that one can add to a product, or an add-on before a product is meant to go live. Building Responsible Tech means putting the user first, and more importantly, putting diverse users first, at every stage of the development process. This requires a fundamental shift in product development culture and incentives to ensure that product managers, engineers, designers, and researchers are all pushing towards an approach that is focused less on the immediate MVP, but on the long-term harms, impacts, and opportunities.

Connect with Tulsee at [@tulseedoshi](#)

"Building Responsible Tech means putting the user first, and more importantly, putting diverse users first, at every stage of the development process. This requires a fundamental shift in product development culture and incentives to ensure that product managers, engineers, designers, and researchers are all pushing towards an approach that is focused less on the immediate MVP, but on the long-term harms, impacts, and opportunities."

-Tulsee Doshi, Product Lead - ML Fairness and Responsible AI, Google

GET TO KNOW

Elizabeth Renieris

Founder, HACKYLAWYER



What are the most pressing and important topics in Responsible Tech?

Figuring out the basket of existing and new rights that apply in the digital space and in respect of digital technologies; genuine interdisciplinarity and collaboration across domains; the evaluation of power and power dynamics; the acceptable tradeoff between harms and "innovation" (and the meaning of innovation).

How did you pave your career in the Responsible Tech field? What advice would you give to college &

grad students looking to be involved in the Responsible Tech ecosystem?

Accidentally and intentionally at the same time. While I couldn't identify the specific roles or organizations I wanted to work with in advance, I followed the threads of what piqued my interest, curiosity, and passion. I have also stayed with or abandoned opportunities based on the degree of alignment I felt with my core values and principles. My advice would be to follow your curiosity, speak your mind, stay in alignment, and honor your deepest values and

principles. Always think about the deeper "why" you are doing something.

What impact is your company having on the Responsible Tech ecosystem? How is your company helping to build a better tech future?

My org is a team of 1. However, I work with a number of influential organizations in the responsible tech space. Through that work, I can scale my own impact and influence. My personal philosophy is that we need to bridge the gap between tech, law, and policy because that is where the identification of values and norm-setting will happen in a way that can translate into practice.

What are the biggest hurdles with the Responsible Tech movement right now?

I think there are two primary hurdles (1) resources and (2) urgency. I personally spend a lot of time doing uncompensated work and just keeping on top of developments in responsible tech/tech policy. While urgency is good, it is important to resist the pace of the news cycle, initiatives that sound good (but won't actually change anything), and all of the mechanics of our attention economy. The real work of Responsible Tech takes time and reflection.

Connect with Elizabeth at [@hackylawyER](https://twitter.com/hackylawyER)

GET TO KNOW

Charlie Oliver

CEO, Tech 2025



What are the most pressing and important topics in Responsible Tech?

The ignorance of the consumer and the general public regarding the technologies they use and their potential to do harm, the unwillingness of companies (including big tech) to invest in substantive education of the general public that ISN'T tied to their products, services and corporate goals, the lack of inclusiveness and diversity when developing technologies, lack of ethics oversight boards, lack of legislation that supports

enforcement of equitable development, distribution and profit of technology.

How did you pave your career in the Responsible Tech field? What advice would you give to college & grad students looking to be involved in the Responsible Tech ecosystem?

I didn't pave my career intentionally for Responsible Tech, nor has this been my intentional goal per se. I don't know what to tell you. I fell into it. In 2016, Eric Schmidt, Sebastian Thrun and Mark Zuckerberg all made public

statements about the potential negative impact of emerging tech on society. Their comments were arrogant, dismissive, insensitive and they refused to acknowledge any downside to this new technology that was already in so many products we used. They pissed me off. They were willing to innovate at all costs, and didn't seem to care that potentially millions of people would fall through the cracks or pay the price for their tech utopia. My answer was Tech 2025 (give people info, a voice, and tools to solve the problems and hold tech companies accountable). To college students, live your life with a sense of mindfulness about how your decisions, goals and MISTAKES impact others around you (from your family and friends, to the broader society). If you want to be an advocate for Responsible Tech, be responsible for how you use tech in your own life.

What impact is your organization having on the Responsible Tech ecosystem? How is your company helping to build a better tech future?

I have no idea what impact Tech 2025 is having. That's not for me to decide. People tell us we've helped them to change the trajectory of their careers, launch startups, think differently about tech, etc. Aside from educating people and businesses on emerging technologies, we ask the hard questions EARLY that others aren't asking and then listen to what people are thinking and feeling about the issues around technology. We give people a platform to share their ideas and solutions.

What are the biggest hurdles with the Responsible Tech movement right now?

Legislation. Big tech. A complacent public that continues to give companies their data without question.

Connect with Charlie at @itscomplicated

GET TO KNOW

Shilpi Agarwal

Founder and Chief Data Ethics Officer at DataEthics4All



What are the most pressing and important topics in Responsible Tech?

Apply data in an ethical way to reduce Racial and Cultural divide in society.

How did you pave your career in the Responsible Tech field? What advice would you give to college & grad students looking to be involved in the Responsible Tech ecosystem?

I was teaching a Business Course at Stanford Continuing Studies after the 2016 Political Elections and the

Cambridge Analytica Scandal. There was heightened awareness amongst my students around Data Privacy and Ad Weaponization who came from some of the top Tech Companies in Silicon Valley. From our discussions, it was clear that there was a need for a Grassroots Organization that cared about Raising awareness on the Dangers of using Data Science without Ethical Considerations and Educating Consumers on their Data Rights. This led to the start of the DataEthics4All Initiative.

To young college and grad students looking to be involved in the

Responsible Tech ecosystem, my advice would be: Sure, they're living in unprecedented times. Not only do we have an explosion of data and a pandemic that has made its mark in history, but they're fortunate that there are so many wonderful Grassroots Organizations today like All Tech Is Human, DataEthics4All and many others that truly care about Responsible Tech. I'd advise them to get started with these organizations and take these learnings back to their everyday lives, at home, in their local Communities and in everything they do at Work.

What impact is your company having on the Responsible Tech ecosystem? How is your company helping to build a better tech future?

DataEthics4All is building a Community of World Leaders in Technology, Data, Ethics, Policy & Social Impact who care about the next Generation of Responsible and Inclusive Tech. Together we're building a stronger, more Equitable Society, rich in Culture, Race and Ethnicity with Tech having it's rightful place and used for Social Good.

Connect with Shilpi at @DataEthics4All & @SocialDataGirl

GET TO KNOW

Marianna Ganapini

Assistant Professor, Union College



What are the most pressing and important topics in Responsible Tech?

There are many pressing issues in Responsible Tech (e.g. privacy, bias), but I would like to highlight the following important topic: the relation between tech and mental wellbeing. We need to understand more about the (positive and negative) psychological effects of using new technologies by focusing especially on the effects tech-use has on children and teenagers. I think it is also important to think more about how technology can support the health and wellbeing of

older folks. And more broadly, we should start reflecting on the role we want tech to have in our society. We should ask ourselves: how can technology help us achieve our collective long-term goals?

How did you pave your career in the Responsible Tech field?

I am a college professor and I got my PhD in Philosophy from Johns Hopkins University. I recently joined the Montreal AI Ethics Institute as a Researcher. I believe that Philosophy has an important role to play in the Responsible tech ecosystem by offering key insights

that will inform and guide our relationship with the tech world. Right now my advice to any college student would be to double major in philosophy and computer science, or to try to combine a STEM-based education with the arts and humanities. Only a well-rounded education provides the right tools to tackle all the challenges and opportunities that are ahead of us.

What impact is your org having on the Responsible Tech ecosystem?

The Montreal AI Ethics Institute is an international, non-profit research institute dedicated to defining humanity's place in a world increasingly characterized and driven by algorithms. We do this by creating tangible and applied technical and policy research in the ethical, safe, and inclusive development of AI. Our goals are to build public competence and understanding of the societal impacts of AI and to equip and empower diverse stakeholders to actively engage in the shaping of technical and policy measures in the development and deployment of AI systems.

What are the biggest hurdles with the Responsible Tech movement right now?

I hope the Responsible tech community will soon start to have some direct and real impact on the tech world. One way to have an impact is to offer practical solutions and recommendations to solve the ethical problems that new technologies face. These solutions need to be evidence-based and tested before they are implemented. For instance, there is a lot of empirical work on disinformation that indicates that nudges and "inoculation" strategies are helpful in fighting fake news. Hopefully, we will see more of these practical solutions to current ethical problems be adopted and implemented by social media platforms and tech companies.

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GET TO KNOW

Dr. Dorothea Baur

Ethics consultant in tech & finance



What are the most pressing and important topics in Responsible Tech?

The most pressing topic for Responsible Tech is how to establish accountability. There is no Responsible Tech without accountability because tech is never just intrinsically good. We always need to ask about the purpose of a technology and we need to keep in mind potential abuses and unintended consequences. In order to be able to judge this we need transparency as to how a technology is developed and how it is being used. This might

require overcoming outdated notions of trade secrecy. Without accountability and transparency we risk being at the mercy of algorithms or of their developers and we lack the means to meaningfully address issues of fairness and discrimination.

How did you pave your career in the Responsible Tech field? What advice would you give to college & grad students looking to be involved in the Responsible Tech ecosystem?

I used to be a scholar in business ethics until I realized that I could

have more impact by directly working with companies, so I established my own consulting company. Whatever your background is, the most important thing is passion and genuine curiosity. Attend networking events, raise your voice online and offline and ask questions. Always take a very close look at the value commitments of companies that interest you.

What are the biggest hurdles with the Responsible Tech movement right now?

The biggest hurdle in my opinion is a divide between those working on Responsible Tech inside companies and those criticizing from the outside. There need to be more bridges between the two worlds, which requires more open-mindedness and the willingness to overcome potential prejudices. The back and forth between 'ethics washing' and 'ethics bashing' is taking up too much space at the moment.

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GET TO KNOW

Yakaira Nunez

Senior Director, Research & Insights at Salesforce



What are the most pressing and important topics in Responsible Tech?

K-12 education - start teaching about systems design and consequence scanning early, Ethical frameworks embedded in product design: rethink the product development lifecycle to discreetly include ethics, bias management, empathy, and societal impacts. Work **with** Bias: we recognize that bias in any system is inherent - the work to understand and manage the bias requires diversity of thought and backgrounds - build that into the way you build tech.

How did you pave your career in the Responsible Tech field? What advice would you give to college & grad students looking to be involved in the Responsible Tech ecosystem?

My journey started at a young age. I was a 'red diaper baby' and as such spent much of my childhood working with my family to help craft a system that was anti-racist and equitable for all. As I grew up I continued to be vocal in my commitment to crafting a future I wanted to be in from founding environmental groups to crafting communities for Dominican

Americans in the Midwest, to dedicating years to community development and economic restoration work in New Orleans. For the last 20 years of that journey I worked in tech. I applied the principles and values that I learned to my work through management consulting and through my volunteer work at Salesforce. The advice I would give to students today who want to be involved in Responsible tech is three fold 1. recognize that it is a marathon...not a sprint. 2. start small in your actions then as you grow your scope of influence so too will your impact grow 3. take advantage of those who have come before you - there are many of us who are doing the good work of responsible tech - find us and let us help you in your Responsible Tech Journey.

What are the biggest hurdles with the Responsible Tech movement right now?

Quarterly Business Reviews: Responsible tech is hamstrung if you have to deliver revenue impact on a quarterly basis. Responsible tech takes time, commitment to identify unintended consequences, an ability to react should insights identify risks and deliver a plan to manage them. Agile Methodology: similar to the cadence challenges with QBRs this methodology indexes on speed over insight, while a 2 week spike might occasionally be used to identify the best way forward it is usually not considered as important as producing code. How might we craft responsible tech? By creating a software / product development lifecycle that has ethical reviews, impact evaluations, & user research baked into it. Finally, the cult of Individualism which has gotten us to where we are today cannot sustain us into a future where we are thinking about the collective good.

Connect with Yakaira at @Digethno

John C. Havens

Author, Heartificial Intelligence



What are the most pressing and important topics in Responsible Tech?

What "responsible" or "good" mean in practical application. For me, all technology must be created in ways that probably increase long term, holistic (meaning available to all globally) human wellbeing in symbiosis with environmental flourishing. This is the "people and planet" part of the "triple bottom line" where the "profit" part of the equation should be in service to the other two, not the other way around. GDP is basically focused on exponential growth and fiscal

metrics in isolation - continuing to ignore People and the Planet means no future of any kind, so short term mindsets need to evolve.

What advice would you give to college & grad students looking to be involved in the Responsible Tech ecosystem?

Take basic Data Science courses to familiarize yourself with the "language" of AI and all future tech. But be aware that binary code is simply one of the communication platforms making up technology today. It's also beyond critical to understand sovereign data (versus

just "privacy" alone) and what it means to use applied ethics methodologies to understand end user values for any system being built. Finally, it's essential to recognize that the power structures in place today largely revolving around economics are what keep a majority of the world's people and our planet from receiving the care they need and deserve. So being "responsible" is more about changing the paradigm and the systems around the socio-technical space than in simply adjusting an algorithm or device alone.

What impact is your organization having on the Responsible Tech ecosystem? How is your organization helping to build a better tech future?

I work at IEEE, the world's largest technical professional association. Here I'm speaking as "John, author of Heartificial Intelligence." But I love my job and have been able to drive the creation of a document called Ethically Aligned Design and over 14 standards working groups focused on prioritizing an applied ethics focus for all AI / tech design at the outset of any process.

What are the biggest hurdles with the Responsible Tech movement right now?

The socio-technical systems in place that prioritize exponential growth, competition, and the ability for any of us to think we can delegate introspection to an algorithm.

Connect with John at [@johnchavens](https://twitter.com/johnchavens)

GET TO KNOW

Brandie Nonnecke

Director, CITRIS Policy Lab, UC Berkeley



What are the most pressing and important topics in Responsible Tech?

In 2020, we've witnessed dozens of large-scale data breaches that exposed the personal information of millions, flawed algorithms that have resulted in biased decision-making within critical social institutions, and the spread of disinformation that has entrenched distrust and polarization before the presidential election. Technology plays a central role within our critical economic, social, and political institutions. There has been significant work over the last

few years to develop ethical principles to guide the development of responsible tech. But, moving from principles to practices is not always straightforward. We must now put considerable effort into operationalizing ethical principles into sound practices.

How did you pave your career in the Responsible Tech field? What advice would you give to college & grad students looking to be involved in the Responsible Tech ecosystem?

In 2009, I conducted my master's thesis research in rural Uganda

investigating the use of mobile phones among subsistence farmers. While basic infrastructure—roads, electricity, plumbing—had not yet reached all corners of their village, mobile telecommunications had. The mobile phone had been transformative for their community, enabling exposure to a wealth of information, the transfer of domestic remittances, and access to new agricultural markets. At the same time, the mobile phone disrupted local supply chains and SMS misinformation campaigns wreaked havoc. While technology can play a positive role in people's livelihoods, it can also cause harm. Since then, I've been fascinated with studying the positive and negative interrelationships between technology and society and the role that public policy can play in helping to support responsible technology development and use.

Responsible tech development is grounded in the critical role of multiple perspectives coming together to better understand the positive and negative effects of technology. We must engage all disciplines to collaboratively develop appropriate strategies to mitigate harms and maximize benefits. I have witnessed non-STEM students self-select themselves out of working on technology development projects under the false assumption that if they don't have "technical" skills they don't have anything to contribute to technology development. But the opposite is true! Perspectives from the social sciences, law, art, humanities (all disciplines!) are critical assets in the responsible tech ecosystem. Everyone plays an important role in responsible tech development

What impact is your organization having on the Responsible Tech ecosystem? How is your organization helping to build a better tech future?

For nearly 20 years, CITRIS and the Banatao Institute (CITRIS) have brought

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together leading researchers at UC Berkeley, UC Davis, UC Merced, and UC Santa Cruz to advance information technology development and application for the public good. Launched in 2018, the CITRIS Policy Lab furthers this goal by supporting interdisciplinary research, education, and thought leadership that address core questions regarding the role of formal and informal regulation in promoting innovation and amplifying its positive effects on society. We work with elected leaders, the private sector, and the public to teach them about emerging technology policy issues and appropriate strategies to mitigate harm and maximize societal benefits. Learn more about our work at the CITRIS Policy Lab at citrispolicylab.org.

What are the biggest hurdles with the Responsible Tech movement right now?

Platforms hold a considerable amount of social, political, and economic power. Much of the questioning in the monumental House Judiciary Committee hearing on platforms and their market power held in July 2020 (<https://judiciary.house.gov/calendar/eventsingle.aspx?EventID=3113>) was fueled by research conducted by journalists and academics. While nascent data privacy legislation is important to ensure the protection of personal data, platforms are increasingly using data privacy as a shield to decrease transparency and accountability by limiting data access for independent public interest research. This is highly problematic for ensuring transparency and accountability in the effects of these tech companies on society. In response, the Public Interest Research Alliance (PIRA) has been established to develop principles and operational guides for the appropriate collection, storage, and use of platform data for public interest research. Learn more about the PIRA and ways to get involved at citrispolicylab.org/pira/

Connect with Brandie at [@BNonnecke](https://twitter.com/BNonnecke)

"I have witnessed non-STEM students self-select themselves out of working on technology development projects under the false assumption that if they don't have "technical" skills they don't have anything to contribute to technology development. But the opposite is true! Perspectives from the social sciences, law, art, humanities (all disciplines!) are critical assets in the responsible tech ecosystem." -Brandie Nonnecke, Director, CITRIS Policy Lab, UC Berkeley

GET TO KNOW

Raj Shekhar

Founder and Executive Director, AI Policy Exchange



What are the most pressing and important topics in Responsible Tech?

If one looks at the big picture, the increasing viability of AI systems exercising autonomy is something that all of us should be caring about the most. The more autonomy we go on encoding into our AI systems, the less responsibility we would be able to assign to their human developers or operators, reasonably or fairly, when something goes wrong. Hence, in my opinion, the most pressing public policy question concerning Responsible Tech is whether

humanity should continue relegating its autonomy to AI systems in exchange for the great civilizational benefits that these systems seem to promise. Does the eventual progress of the human civilization lie in thriving by accident? If so, Responsible Tech that ought to be celebrating human autonomy, and thereby affirming human responsibility, is already set to become history.

How did you pave your career in the Responsible Tech field? What advice would you give to college & grad students looking to be involved in the Responsible Tech

ecosystem?

My formal introduction to Responsible Tech was during my research assistantship under a data scientist, who was keen on exploring the various ethical quandaries that were surfacing in the governance of AI technologies at the time.

Every day, for six weeks consecutively, I sifted through several academic research papers exemplifying the ethical concerns around the adoption & use of AI technologies. It was troubling for me to realize that the big media had only remotely covered these concerns for public appraisal. However, it wasn't surprising as most of my research that had enlightened me on Responsible Tech so brilliantly, was, unfortunately, in the form of laboriously long, jargon-loaded texts.

Even so, these "cryptic" texts conveyed what I would call "gospels about the brave new world of AI", and therefore, they deserved and demanded public reflection so that AI technologies could be developed and deployed responsibly for the greatest public good.

I started AI Policy Exchange to lay a foundation for the public appraisal of AI technologies and the ethical & policy concerns related to their adoption & use to eventually enable public conception of what should constitute Responsible AI. What we set out to do at AI Policy Exchange was pretty simple — publish the most pressing discourses on AI policy & governance that did not sound like rocket science.

If you are a college student looking to make a career in Responsible Tech, start by identifying a real opportunity for you to contribute. You could always start by doing the simplest things. Many a time, accomplishing the simplest things could bring you the greatest satisfaction and society the greatest benefit.

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What impact is your organization having on the Responsible Tech ecosystem? How is your organization helping to build a better tech future?

Ever since its inception, AI Policy Exchange has been constantly striving to break the esoteric nature of the knowledge informing the societal risks and benefits that are likely to result from the adoption & use of AI technologies by governments, businesses, and citizens. Our mission has struck a chord with several global experts and leading international institutions working at the intersection of AI and public policy, who have joined hands with us to bolster our efforts towards creating an AI-literate society.

AI Policy Exchange has also recently set out to expand its mission to include an ambitious mandate for facilitating and leading global collaborations between the members of its cooperative association to produce public policy research informing the most pressing AI policy & governance challenges. This is only a small step towards enabling possibilities for achieving cross-cultural appreciation of the many wicked problems that accompany the onset of the fourth industrial era.

What are the biggest hurdles with the Responsible Tech movement right now?

We are living in an era that is witnessing humanity's seamless interaction with "unreal" technologies that show unprecedented potential to alter all of our current social, economic, political, and cultural beings, sooner than we realize. Hence, proposals for Responsible Tech must be preceded by extensive public consultations on the most pressing issues around the adoption & use of emerging technologies.

However, these consultations would become meaningful only when they are grounded in the genuine public appraisal of the benefits and risks from the adoption & use of emerging technologies. This will happen only if the vocabulary of knowledge exemplifying the societal risks and benefits from the adoption & use of emerging technologies becomes accessible for the general public.

Else, proposals for Responsible Tech are bound to become exclusionary and technosolutionistic – that is, irresponsible.

Connect with Raj at @RajShekhar004

"If you are a college student looking to make a career in Responsible Tech, start by identifying a real opportunity for you to contribute. You could always start by doing the simplest things." -Raj Shekhar, Founder and Executive Director, AI Policy Exchange

Branka Panic

Founding Director, AI for Peace



What are the most pressing and important topics in Responsible Tech?

Living through an unprecedented global pandemic crisis, I believe the most important topic in Responsible Tech is how to responsibly innovate in a state of protracted emergency. From 3D-printed ventilator parts, vaccine and drug development, and contact tracing apps, the COVID-19 has ushered in a new era of urgent innovation. AI and related technologies can help us detect, understand, and predict the spread of the virus, providing early warning

signs and informing effective interventions and policies. The crisis opened the door to new technologies being tested in education, through schooling apps, online classes, and personalized individualized instructions matched with student's strengths and weaknesses. Technology is being used and misused in spreading information and disinformation, amplifying the crisis, but it can also be used in combating online disinformation.

These and other innovative tech applications are designed, developed, and implemented with

urgency. The need to apply those technological solutions quickly raised many ethical challenges. Broad ethical principles, including responsibility, do not offer clear guidelines in emergencies. This is becoming a pressing issue to tackle, ensuring that applications with urgency come with ethics with urgency, to ensure that AI can be safely, beneficially, and responsibly used in the pandemic response and beyond. An important element of this process is ensuring that the use of tech comes with protecting people's privacy and civil liberties and prioritizing human rights protection instead of speed.

How did you pave your career in the Responsible Tech field? What advice would you give to college & grad students looking to be involved in the Responsible Tech ecosystem?

My engagement in the Responsible Tech field comes through my work in peacebuilding and humanitarian action. The use of technologies by peacebuilders marked the beginning of "digital peacebuilding" and the so-called "PeaceTech" movement aimed at analyzing conflict, preventing violence, protecting civilians, facilitating dialogue, and mobilizing through digital networks. Being passionate about sustaining peace and protecting human rights, I came into the field excited about combining data-centric and human-centric approaches to solve some of the biggest global challenges the world is facing today. At the same time, being aware of all of the perils of new technologies, my focus broadened on researching risks, ethical challenges, blind spots, and unintended consequences of exponential technologies.

My advice to all students and, in fact, to anybody wishing to enter this field at any stage of their career is: be curious and follow your passion, listen to yourself, to what excites you and what you care about the most, and steer your work in

Continued on next page

that direction.

There is a place and need for all of your voices to be heard and involved in the Responsible Tech field. There is hardly any sphere of our lives today that is not touched by technologies, and this ecosystem is becoming bigger every day. You are needed as responsible tech activists in big and small tech companies, as executives and as employees, as designers, developers, and consumers, no matter which role you have you are needed in amplifying voices of Responsible Tech.

What impact is your organization having on the Responsible Tech ecosystem? How is your organization helping to build a better tech future?

AI for Peace is a community of AI and domain experts who are committed to using AI to create lasting peace. We are strengthening the essence of “responsible tech” by adding the element of peacebuilding to principles of fairness, inclusiveness, transparency, privacy, security, and accountability. AI for Peace is advocating the peacebuilding approach to be embedded in all products and activities shaped by AI and related technologies. We believe there is a responsibility of the tech field to ensure preventing violence and sustaining peace.

Our vision is a future in which AI benefits peace, security, and sustainable development and where diverse voices influence the creation of AI and related technologies. With the peace and security approach we don't tackle only autonomous weapons and other military tech applications, but all technologies. Social media can incite hatred and violence, fuel polarization, spread disinformation, and build support for authoritarian leaders.

Our goal is to make sure that social media companies take responsibility in combating hate speech, fighting disinformation, and empowering social movements to support democracy and protect human rights. Algorithms that reinforce racism and AI-enabled biased decision making are not only an issue of privacy and discrimination but of peace and security, which we see now clearer than ever with facial recognition systems used in policing. We, at AI for Peace, advocate for responsible tech, for safeguarding against the misuse and unintended consequences, and for protecting not only national but human security of all individuals and communities around the world.

What are the biggest hurdles with the Responsible Tech movement right now?

In previous years we have witnessed an increase in developing and adopting responsible tech guidelines and ethical principles. Most of them are agreeing on the importance of values such as privacy, transparency, justice, and accountability. However, these principles are often abstract to retain truth across different contexts, which leaves them too vague to be applied in specific cases. The next challenge for the Responsible Tech movement will be helping to translate those principles into specific actions.

Connect with Branka at [@branka2panic](https://twitter.com/branka2panic)

"There is hardly any sphere of our lives today that is not touched by technologies, and this ecosystem is becoming bigger every day. You are needed as responsible tech activists in big and small tech companies, as executives and as employees, as designers, developers, and consumers, no matter which role you have you are needed in amplifying voices of Responsible Tech." -Branka Panic, Founding Director/ AI for Peace

Mia Shah-Dand

CEO, Lighthouse3 and founder of Women in AI Ethics initiative



What are the most pressing and important topics in Responsible Tech?

Lack of diversity and representation of marginalized communities in tech.

How did you pave your career in the Responsible Tech field? What advice would you give to college & grad students looking to be involved in the Responsible Tech ecosystem?

I started in Silicon Valley over a decade back and helped tech companies adopt and market new

technologies. I was disillusioned by how the tech world prioritized bottom line over human lives. I left the corporate world and launched my own consulting and research advisory firm, Lighthouse3, which focuses on helping large companies adopt new technologies responsibly, which includes setting up comprehensive policies, engaging diverse stakeholders right at initiation, and instituting the right processes to ensure that any new technology is built, adopted, and deployed responsibly.

What impact is your organization having on the Responsible Tech

ecosystem?

In addition to helping companies adopt and deploy new technologies responsibly, I also launched the global Women in AI Ethics initiative and created the "100 Brilliant Women in AI Ethics" to increase representation and recognition of talented women in this space. We can't have ethical or responsible AI without inclusion of diverse voices. To support our women and non-binary community during the pandemic, we launched a AI Ethics mentoring program and also launched a Wikipedia project to increase representation of women in this space.

What are the biggest hurdles with the Responsible Tech movement right now?

Under-representation of marginalized groups like women of color, LGBTQ+, others in AI/Tech is the single most critical issue in AI today. We have this irrational belief that ethics and diversity in AI are two different, unrelated issues. Lack of diversity leads to biased algorithms and ethical blind spots in the technologies that's being developed because they are solely guided by the whims of white, male dominated tech community.

Too many companies and individuals use words like "diversity" and "anti-racist" but don't actually recruit Black or women of color or give them a seat at the table, which is why there are critical ethical gaps in the destructive and flawed technology that's being unleashed on our societies today.

Connect with Mia at @MiaD

GET TO KNOW

Mona Sloane

Sociologist, NYU



What are the most pressing and important topics in Responsible Tech?

I think that the most important topic in Responsible Tech is justice - racial justice, social justice, economic justice, ecological justice. And I think that the next generation of technologists is hungry to address this! I am excited to support them in their quest.

How did you pave your career in the Responsible Tech field? What advice would you give to college & grad students looking to be involved in the Responsible Tech

ecosystem?

My path to Responsible Tech was a meandering one. Which, in hindsight, I think is a good thing! I can draw on many different experiences and perspectives when working on issues of Responsible Tech. The advice I would give to college and grad students: go your way, keep exploring, work hard, be genuine, keep a view for the bigger picture, create networks of support, find mentors - and mentor others!

What impact is your organization having on the Responsible Tech ecosystem?

The NYU Alliance for Public Interest Technology is a global center for research and thought leadership on the responsible and ethical creation, use and governance of technology in society. We leverage our multidisciplinary faculty, research, resources, and professional and community networks to collaborate with, and engage the university community, public institutions, public interest organizations, and community based organizations, to significantly impact the world's current and future technology landscape.

What are the biggest hurdles with the Responsible Tech movement right now?

I think one of the biggest hurdles is siloed education. We need a more holistic approach to understanding the ways in which technology is deeply embedded in the social, economic and political world. We need a new generation of translators who can move between the worlds and ensure we leave nobody behind.

Connect with Mona at [@mona_sloane](#)

Changemakers

We've been interviewing the movers, shakers, and changemakers of the Responsible Tech space since 2018

Our aim as an organization is to diversify the traditional tech pipeline with more backgrounds, disciplines, and lived experiences that are better capable of tackling wicked problems.

A black and white portrait of Raina Kumra, a woman with dark, wavy hair, wearing a light-colored top and a necklace. She is looking directly at the camera with a slight smile.

RAINA KUMRA

Raina Kumra is a partner at The Fund LA, an early stage venture fund, and the CEO of Juggernaut, a brand movement agency and organizational change bureau. She recently launched a Tech Ethics course on LinkedIn Learning and previously led strategy and investments for the Technology Ethics portfolio at Omidyar Network. She is a member of The Council on Foreign Relations and one of Fast Company's Most Creative People in Business.

Raina spoke with All Tech Is Human's Andrew Sears about the role that venture capitalists play in the tech ethics ecosystem, the relationship between ethics and human-centered design, and more.

What were some of the key steps in your professional journey to the tech ethics space?

Raina: I think my time in programmatic advertising was foundational, it showed me how good intentions can lead to the wrong outcome quickly if left unchecked. Another key moment was my time as an operator in a startup - being a founder is fraught with so much worry, that I can see how adding an ethical lens to product and data and AI is an added challenge.



You're a Managing Partner at The Fund. In what ways does your approach differ from other venture capital firms?

I apply an ethical lens to both the founders, product and team. A culture of doing things right truly matters, especially in early stage startups, and we look for the founders who can go further into the future and plan for risk and downsides as much as for upsides.

What ethical responsibility do venture capitalists have in the technology ecosystem? What should VCs do to exercise this responsibility?

Investors hold a critical lever in normalizing technology ethics. We need our investors to be as aware as our founders in order to change the ecosystem for the better. Else, more companies doing things that aren't good for users, the environment, for our social fabric will continue to get funding, and that's not moving the needle in the right direction.

As the CEO of Juggernaut, human-centered design plays an important role in the consulting that you provide to clients. What relationship have you observed between the practice of human-centered design and ethical technology outcomes?

I really think of ethical design and human centered design to be completely linked - by applying empathy and putting the user or customer at the center of the intention and designed outcome of a product, you can fundamentally shift away from a lot of the problems we see happening in technology products today.

You teach a LinkedIn Learning course for general audiences titled Tech Ethics: Avoiding Unintended Consequences. For this course, why did you decide to approach tech ethics through the lens of consequences?

I think everyone who is a builder has the best intentions. We want to move beyond intentions to having a new found understanding of "What happens if?" and a new relationship with personal responsibility in the tech ecosystem. We have passed the buck for too long, and its important for each and every player to grasp the impact of each of their decisions at scale. The course is a great and easy way to understand the basics of what we have for so long forgotten to integrate into our daily standups, board meetings and product launches.

Connect with Raina at @RainaKumra & Juggernaut.is

We have passed the buck for too long, and its important for each and every player to grasp the impact of each of their decisions at scale.

-Raina Kumra

A close-up portrait of Natalie Garrett, a woman with dark hair and bangs, smiling warmly. She is wearing a dark top and small earrings. The background is a soft-focus green outdoor setting.

NATALIE GARRETT

Natalie Garrett is a PhD student researching technology ethics and privacy at the University of Colorado Boulder. Her pioneering research at The Internet Rules Lab and Pervasive Data Ethics for Computational Research (PERVADE) examines why tech companies fall short on ethics and what can be done to change the tide. Natalie spoke with Andrew from All Tech Is Human about the concept of ethical debt and the importance of ethics training for technical workers.

How and why did you first become passionate about the need to think critically about the ethical dimension of technology?

I started wondering about the ethical dimensions of technology when working at and with startups and connecting with the tech community in Boulder in 2014. There was and still is an ‘anything goes’ approach which is great for some things (like, let’s try to revolutionize space launch and make it cheaper), but not so great for other things (like, an app that listens to your doctor/patient conversations and has a founder who hasn’t considered privacy issues). There’s a rush to solutions in tech and the number of tech controversies we see in the news daily is evidence that the rushed approach needs to shift.

You and your colleague, Casey Fiesler, are researching a concept called ethical debt. What is the inspiration for this research?

The inspiration for this research is my work with product teams at startups



and my interactions with the tech community here in Boulder. At startups that are under-resourced or experiencing intense business pressure to validate a product in the market, products and features are shortcut. When teams don't have the time, expertise, or resources to build the best product possible, they often refer to the shortcuts or identified areas that will need fixing (aka refactoring) later as 'technical debt'.

When we transition this concept to ethical debt, the results are similar. Many of the reasons a team may accumulate technical debt (lack of technical expertise, lack of time, lack of consideration for all potential uses of a technology, and/or strategic business decisions about risk and cost) are similar to those that lead to the accumulation of ethical debt. The mentality of "we'll fix that later" does not work so well for ethical debt. While it is relatively easy to refactor code, it is harder for companies to fix harm and recover from public outrage over a controversial feature or product. It takes a long time to build public trust and not long to lose it.

What makes ethical debt a uniquely useful framework for understanding ethical failures in tech?

Ethical debt is a useful term that names the knowledge gaps on tech teams and it borrows from the familiar concept of technical debt. Additionally, and like technical debt, ethical debt identifies systemic gaps in expertise in the tech industry that need to be addressed. Gaps in expertise are unsurprising since our research in ethics education in undergraduate computer science departments indicates that ethics, when it IS taught, is often the last course in a curriculum or topic in technical courses. While universities are definitely offering more and more tech ethics courses, the ideal is to teach students to consider social ramifications of technologies as part of technical learning.

You mention in a working paper you and Casey wrote that technologists can be prone to thinking of ethics as a specialized topic for philosophers to worry about. While better ethical training for technologists is important, do dedicated expert ethicists have a role to play in creating ethical technologies? If so, what should that look like?

Absolutely, expert ethicists definitely have a role to play! While universities are making great strides in teaching ethics to computer science majors, it is still taught as a specialization or (at its worst) as an afterthought at the very end of a student's undergraduate career. We want computer scientists to graduate with an understanding that ethics is a part of being a computer scientist. When it is a part of technical practice, it will be much easier for those dedicated experts to do their work within tech companies.

What we want to avoid is using expert ethicists as public relations add-ons or scapegoats. For ethics to be considered as a business function, the entire company needs to buy into considering the social ramifications of products. Ideally, the expert ethicists lead the charge and everyone from the C-level to the entry-level programmer considers ethics as part of their daily work. Ideally an expert ethicist would spend zero time convincing their organization that considering ethics is important work and avoid an internal communication/persuasion struggle.

What are some of the key things that schools, bootcamps, and tech companies should keep in mind when designing and implementing ethics training programs for technical workers?

The answer here is simple yet takes some effort and intention-- ethics needs to be integrated into technical curriculum so it is seen by students and professionals as part of technical practice. The era of 'move fast and break things' is over.

Here's an example of incorporating ethics in computing from our research here at CU Boulder: Thanks to the support of Mozilla's Responsible Computer Science Challenge, we've been working with professors who teach introductory programming to retrofit existing assignments to include ethics. The assignments still cover basic coding concepts, but we also introduce the ethics considerations prior to the assignment in a short discussion. The two assignments we've created so far are about contextual and behavioral advertising and college admission algorithms. I've been really delighted at the response from the students. Anecdotally, the expressions on their faces show that many of them are learning about these concepts for the first time.

Connect with Natalie at @LifeofNoods

A portrait of Will Griffin, a Black man with a goatee, smiling and looking slightly to the right. He is wearing a black t-shirt with a graphic that says "HYPERGIANT". His arms are crossed. The background is a blurred office setting with computer monitors and desks.

WILL GRIFFIN

Will Griffin is the Chief Ethics Officer of Hypergiant Industries, where he has developed and implemented a uniquely effective company-wide AI ethics framework. His past entrepreneurial work has earned him the prestigious IAB/Brandweek Silver Medal for Innovation and the culturally significant NAACP Image Award. His career has taken him from investment banking to consulting to media to tech, and he holds a JD from

Harvard Law School. Will spoke with Andrew from All Tech Is Human about the relationship between law and ethics and what he's learned about implementing ethics frameworks at scale.

You hold a JD from Harvard Law School and have said that an understanding of law is crucial in your work as Chief Ethics Officer. What is the relationship between law and ethics in the context of technology?

William: Since there are not many laws written on AI, I was really discussing the value of organizations understanding the legal reasoning process as they develop and deploy AI use cases. This is where I believe empowered General Counsels, Corporate Compliance, and Public Policy professionals could perform an important function for their companies and society-at-large. The core question is this: if policy-makers understood and knew the risk of a specific AI use case in the same way technology developers and designers did, what laws would they write to protect society? Companies should then implement a private governance regime that conforms to this standard.



The aforementioned legal reasoning process would look like this. First, identify the issue: How is the technology developed and deployed in this AI use case? Then comes the rule: What existing and potential legal issues does the AI use case create? Next, gather the facts: What are the risks created for stakeholders — including society — in the deployment of this AI use case? Then conduct your analysis: What rule/law should exist to manage these risks? Finally, draw a conclusion: how do we design the AI use case to survive this rule/law if it were implemented?

In reality, law plays a very limited role in emerging technology workflows because technological innovation is way ahead of the policy-makers' ability to understand the underlying tech and the risks associated. Sadly, most companies exploit this lack of regulation to maximize profits and minimize management of these risks. AI today is where derivatives and other innovative financial instruments like mortgage-backed securities were in the 1990s. At the beginning of my career I worked in the Structured Finance Group at Goldman Sachs. Our group was comprised of brilliant financial engineers who were creating an entirely new class of securities that the policymakers in Congress and regulators at the SEC never truly understood.

The first mortgage-backed securities were issued in 1968 by Ginnie Mae, Fannie Mae issued its first mortgage-back security in 1981, and the market was issuing trillions of dollars worth of securities a year in the 1990s. Congress did not pass any meaningful mortgage back security regulation until the Dodd-Frank Act in 2011. As a result, trillions of dollars of economic value was created and destroyed in a largely unregulated environment for over fifty years! Since the financial engineers of Wall Street understood the function and risks of mortgage-backed securities better than the regulators, an information asymmetry was created and the general public and policy-makers relied on Wall Street to manage the risks associated with these financial instruments. The industry-wide lack of ethics and poor management of risk in the market resulted in the 2008 Financial Crises and led to the regulation of these securities via Dodd-Frank in 2011.

My goal is to help Hypergiant, our clients, and the emerging tech industry internalize our obligations to society and avoid the disastrous ethical lapses that created the financial crises.

Your ethical framework at Hypergiant is heavily influenced by Immanuel Kant's ethical philosophy. Why did you gravitate towards Kantian ethics as opposed to other ethical systems?

Our co-founder and CEO, Ben Lamm, has a broad vision of "...delivering on the future we were promised." In a nutshell that means developing technology solutions that attempt to solve some of humanities biggest problems (i.e. Climate Change, global pandemics). We wholeheartedly believe AI has a central role to play in these solutions and are excited to be a part of it. Moreover, in an industry where the ethical and legal rules of the road are not written, we cannot look externally and wait for others to give guidance on how to conduct ourselves. We have to be leaders in forging the road ahead. This causes us to look internally and focus on our values, company character, and define our duties to society-at-large.

Kant's deontological framework is a closed-system that focus on the individual agent and does not rely on external factors to determine right/wrong. This approach helps us keep ethics at the heart of the company and informs everything we do. We call this approach Top of Mind Ethics (TOME). The elements are contained in simple heuristic that allows everyone involved in designing and developing solutions to grapple with the hard questions for each AI use case.

1. Goodwill. Is the intent this AI use case positive?
2. Categorical Imperative. If everyone in our company, every company in industry, and every industry in the world deployed AI in this way, what would the world look like?
3. Law of Humanity. Is this use case designed to benefit people, or are people being used as a means to an end?

This ethical reasoning process teaches our developers and designers how to think (reasoning) as opposed to what to think (compliance). We find this process makes our teams more creative, our solutions more robust and able to withstand ethical and legal scrutiny our solutions become public and as laws are developed. Our development team has created a very useful ethical decision-making workflow tool that guides our team through the process and keeps a record of how decisions were made on each use case.

Continued on next page



One of Hypergiant’s ethical principles is that technology should not use people as a means to an end. It’s common for businesses to view people as means, i.e. customers as means to profit, users as means to ad revenue. What does it look like, practically, for a business to flip this on its head?

We could be “good”, sell all of our worldly possessions, and join a monastery, but we live in a material world and humanity depends on economic exchange to survive. We are in a business, so economic value has to be created. How we design the solutions will determine our adherence to the Law of Humanity. For instance, we have a recent use case that designs a predictive maintenance system for the largest provider of railcars in the world. Our team developed several different options for the client. The profit maximization approach, would in theory, recommend replacing all maintenance people with robots – thereby reducing labor costs. This approach fails every step of our ethical model (Goodwill, Categorical Imperative, and Law of Humanity). Since ethics foreclosed the 100% robot option, it made us more creative and think more broadly about how economic value is created in the railcar industry.

How so? The public sector is one of the largest purchasers of railcars (for subways, automated people movers at airports, interstate rail networks etc.). They have a vested interest in keeping their citizens employed (to prevent social unrest) and actually award purchase contracts based on the number of jobs created in their jurisdictions. A fully automated maintenance force would actually cause our client to lose contracts (and economic value) in the public sector. As a result we designed a solution where robots and humans work together resulting in safer railcars for workers and riders (public at-large), as well as supporting a strong labor force (and social stability) in the jurisdictions where we operate. Ethical reasoning allowed us to broaden our vision of economic value creation, while conforming to the Law of Humanity.

What were some of the biggest challenges you faced when implementing the Top of Mind Ethics system, and how did you overcome them?

Very few tech professionals are trained in ethics, so there is a misconception that it is a drag on innovation because it adds a layer of external issues to be considered. Once they integrate TOME’s approach into their workflow they realize it is really another tool that can make them more creative, generate a broader range of solutions, meet the needs of a diverse set of stakeholders and, future-proof their solutions against stifling regulation or outright bans (like facial recognition in some places). Finally, tech developers are human beings, have moral values, egos, and want to have pride in their work. Once they realize that TOME helps accomplish all of these goals they are all in. The key is mandating it into the workflows and they value will become apparent from the very first use case.

Based on your experience, what advice would you give someone looking to implement a tech ethics framework at his or her own company?

Get the CEO (and other C-Suite decision-makers) on-board and equip them to be the chief champion of ethics in the company. This will require you to educate the CEO, link the ethics framework to your company’s stated values, and illustrate how ethics is directly linked to economic value creation. I am fortunate, our CEO Ben Lamm, is an enthusiastic champion for me and ethics at our company. This buy-in ensures that everyone understands that the ethics framework must be implemented into workflows, and baked into the products/services we create. If you cannot get C-Suite buy-in then quit that company and go work somewhere else with better vision and stronger leadership. A company that does not implement ethical principles in AI is destined to fail because the solutions you develop will not be robust and an ethical lapse and disaster is inevitable.

Connect with Will at @WillGriffin1of1

JUMANA ABU- GHAZALEH

Jumana Abu-Ghazaleh is the Founder and President of Pivot for Humanity, a not-for-profit organization working to create a more responsible, ethical, and accountable internet by professionalizing the tech industry. Jumana spent over 20 years in marketing and brand communications, developing and implementing strategies for corporations such as American Express, Yahoo, Coca-Cola, Bank of America, Ally Bank, and Hilton Hotels. She is also the

founder of betwixt.us, a tool that facilitates meaningful conversations between coworkers. Andrew Sears from All Tech Is Human spoke with Jumana about the concept of professionalization and why it's such an urgent need for the tech industry.

Pivot for Humanity is focused on the professionalization of the tech industry. What inspired you to found Pivot for Humanity, and why do you believe professionalization is the right solution to Silicon Valley's ethical problems?

Jumana: In 2014, I launched my tech start-up, betwixt.us, and got to see firsthand how the tech industry operates. I was truly surprised by how singularly focused the sector is on scale and growth as its metrics for success, and I became worried much of the industry was blind to the impact social tech was having on the world.



It's an impact I've witnessed in my nieces and nephews who have grown up in the age of social media: Silicon Valley's fixation with scale and growth at the expense of all other concerns often seems to translate into increased depression and anxiety for kids and teens. Of course, the impact isn't just on kids. For years now, it seems every day we learn of a new crisis or scandal facing social tech.

In my previous career, I spent two decades advising global corporations like American Express, Yahoo, Coca-Cola, and Bank of America on how to reinvent and reposition themselves. I felt it was urgent to incite change in an industry in desperate need of it, and began to investigate how social tech, as an industry, could go about reinventing itself. Real change is systemic, which is what professionalization is. So I founded Pivot for Humanity to better facilitate that change.

What are some of the biggest barriers to professionalization, and how can they be overcome?

The biggest challenge is simply socializing the idea. The word "professionalization" doesn't resonate with people. Many don't know what it means. While we are all familiar with individual doctors and lawyers, we don't necessarily think about them as oath-taking professionals governed by universal standards and ethics, and surrounded by institutions that manifest those standards and ethics. Most people don't understand the painstaking work it took to turn those industries into professions. From everything I've seen, social tech isn't going to get where it needs to be unless it adopts systemic change, which is why we are working hard to socialize the idea through our channels and help unpack the concept for people. It's essential for everyone to understand there is a way forward that is realistic and inclusive.

A major and obvious challenge is getting buy-in from industry leaders, many of whom will continue to stand in the way of any change that forces them to behave differently. Our work is intended to bring together a wide coalition of tech workers, academics, thinkers, and concerned citizens in order to force their hand.

How does professionalization relate to regulation? Will it be up to existing lawmaking or regulator bodies to enforce a professional code, or do new institutions need to be created?

To answer this, it's important to understand the key steps in making Technologist a profession, akin to Doctor or Lawyer. First, we have to develop a shared vision for the industry, expressed as a social contract with humanity, and underpinned by a code of ethics that reflects a commitment to be worthy of the public's trust. An example of this is the Hippocratic Oath. Next, we must outline a universal set of standards, including minimum standards of professional competency and rules of professional conduct. Then comes certification: we have to educate and train practitioners in accordance with these standards and provide them a way to stay up to date on them. We could do this through certification or build it in as part of earning a degree, for instance. Finally, we have to apply: protect the public interest by enforcing standards and imposing disciplinary action when necessary, like losing your technologist license.

The 4th step is key. Without it, this is simply an idea. There indeed needs to be a governing body in order to enforce standards and evolve the profession as the industry and times change.

What are one or two ethical questions in tech for which you haven't yet found a satisfying answer?

What kind of work needs to be done to answer them? In some ways, one of our biggest challenges has been the siloing of individual ethical questions in tech as separate projects — as if you could solve ethical AI and stay antiseptically clear of touching on issues ethical data, worker's rights, and so on. The industry largely remains in a reactive stance when it comes to responsible reform, each company individually dealing with the blowback on a scandal-by-scandal basis. What we need is a roadmap for the industry that clearly outlines a broader holistic vision for reform, as opposed to considering these problems as if they were vacuum-sealed. I believe professionalization is that roadmap.

What can people reading this do to make professionalization a reality?

Join us! Tell your colleagues about us. Help us make this conversation so mainstream it cannot be ignored. A few quick ways to help: sign-up to stay up-to-date on our progress and our needs; follow us Twitter and like us on Facebook. If you'd like to do more, consider joining our advisory board, volunteering time to help us grow, or donating. If you like this idea, reach out and spread the word!

Connect with Jumana at @jumanatag

A portrait of Renée Cummings, a Black woman with voluminous curly hair, wearing a dark grey blazer and large hoop earrings. She is looking slightly to the right of the frame. A microphone is visible in the foreground on the right side. The background consists of horizontal stripes in orange, white, and red.

RENÉE CUMMINGS

Renée Cummings is a criminologist, criminal psychologist, AI ethicist, and AI strategist. As the founder of Urban AI, a community scholar at Columbia University*, and a founding board member of Springer's new AI and Ethics Journal, she is on the frontline of ethical AI, battling bias, discrimination, and injustice and advocating for more diverse, equitable, and inclusive artificial intelligence. Renée specializes in AI for social good, justice-

oriented AI design, social justice in AI policy and governance, and using AI to save lives. Renée spoke with All Tech Is Human's Andrew Sears about AI's potential to transform urban life and the challenges that are being encountered along the way.

You come to your work in AI ethics from a background in criminal justice. How does your experience in criminal justice inform how you approach the field of AI ethics?

Renée: I am extremely passionate about the power, pervasiveness, and potential of AI to design and deploy real time evidence-based solutions to many criminal justice and quality of life challenges. I believe in using AI to rewrite the policing playbook. As calls are amplified to defund the police and radically reimagine policing, I believe the criminal justice system will lean on AI to expedite predictive policing strategies to appease the police and the public.



We have got to be data conscious and data vigilant because without the requisite checks and balances, throughout the design, development and deployment life cycles, AI could be used to deliver very punitive and oppressive strategies that could undermine civil liberties, civil rights, community cohesion and community resilience. We have already experienced some of the perils of facial recognition technologies, predictive policing, risk assessment tools, for sentencing, that overestimate recidivism and frustrate due process. We've seen the risks of outsourcing criminal justice decisions to algorithms.

Therefore, as I am committed to innovation, I am also committed to ethical design and a social justice approach to AI, ensuring justice-oriented design is a prerequisite for crime control and crime prevention. I believe criminologists have a critical role to play in co-designing the future and I continue to say criminology must be the conscience of AI.

You're the founder and CEO of Urban AI. What unique challenges does AI present for urban communities, and what sorts of solutions are you working towards?

Cities are the laboratories of now and the future. AI is an absolute game changer, a futuristic Bunsen burner. As we negotiate our way out of this pandemic and design data-driven strategies to prevent future pandemics, the concept of Urban AI will flourish. We will seek urban AI solutions for more contactless interfaces, telehealth, telelearning, more connected communication and intelligent transport systems, food security, climate security, public safety, and an improved quality of life. With Urban AI, I am combining epidemiological criminology, urban criminology, urban technology, and urban culture to ensure equity in the access to resources, inclusive innovation, diverse, principled, and ethical design of AI systems. Now, I just need some investors!

There's been a spotlight on AI surveillance technology recently, particularly on how it can contribute to racially biased policing. What other implementations of AI technologies do you see contributing to systemic racism?

Systemic racism is so deeply rooted in everyday life that no application of AI is immune to its debilitating effects. Therefore, every implementation of AI must be conscious of systemic racism, bias, and discrimination and ensure there are robust detection and mitigation strategies as well as inclusive design which respects and celebrates diversity and equity. AI is already doing some reflection, with some tech companies abandoning further development of facial recognition technologies that discriminate and committing to advancing racial justice, according to their press statements, either by hiring, investing in, or supporting black talent. While racial justice may now be de rigueur for tech companies, what is required is an end to corporate tokenism and a commitment to meaningful and sustained organizational change. Not a PR exercise, but a new consciousness in doing business.

Much has been written about the whiteness of Silicon Valley; how the people who are designing and building our technological future are predominantly white. What are some of the blindspots that white technologists tend to have when envisioning the future, and what unique insights do people of color bring to conversations about the future?

Silicon Valley needs to do some deep soul-searching. Tech companies, over the years, have expended extraordinary resources on diversity, inclusion, anti-discrimination and implicit bias training and best practice organizational policies. Have the efforts and investment amounted to little more than window dressing? Are you going to design an algorithm to teach you how to be human and have compassion, empathy, unconditional positive regard and be committed to equality and justice? Twenty years from now, or less, the majority of the U.S. population will be people of color. Therefore, every conversation about the future is a conversation about people of color.

You're a founding board member for Springer's new AI and Ethics Journal. What are some of the unresolved questions on the frontier of AI ethics that you're hoping will be explored in this journal?

This is an opportunity to participate in an exercise that will future proof our tomorrow, today. This is important to me because I am committed to ethical AI. I am also committed to ensuring due process, duty of care and public engagement are prerequisites for ethical design and inclusive innovation. The long-term impacts of technology on society must be a priority as we innovate. Protecting the public interest means providing a forum for researchers, developers, users, public policy makers, and the public to better understand the challenges of ethics in AI, and to address them in ways that don't stymie innovation but encourage due diligence, diversity, and the understanding that vulnerable groups must be visible in AI and not revictimized or further marginalized. Once we get that right, we would have answered many of the unresolved questions on the frontier of AI ethics. *Connect with Renée at @CummingsRenee*

*Since this interview was conducted, Renée Cummings has become the Data Activist in Residence at the University of Virginia's School of Data Science.



OLIVIA GAMBELIN

Olivia Gambelin is an AI Ethicist and Founder/CEO of Ethical Intelligence, a global tech ethics consultancy. As the co-founder of the Beneficial AI Society, an Advisor at Tech Scotland Advocates, and a contributor to Ethics in AI, Olivia's work brings ethical analysis into tech development to create human-centric innovation. She holds an MSc in Philosophy from the University of Edinburgh with a concentration in AI Ethics and a BA in

Philosophy and Entrepreneurship from Baylor University. All Tech Is Human's Andrew Sears spoke with Olivia about her journey from Silicon Valley to the European Union and how it has shaped her understanding of AI ethics.

You founded Ethical Intelligence while in grad school at the University of Edinburgh. What was your initial inspiration for starting the company?

Olivia: Prior to Ethical Intelligence, I had co-founded and was running a social group called the Beneficial AI Society. We were a mismatched group of philosophers and programmers who would meet once a week in a local pub to discuss recent AI applications and their implications for humanity. One of my favorite parts to running the society was the collaboration between two very different fields, as it seemed to unlock this deeper understanding of the problems at hand and result in innovative potential solutions.



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It was during this experience that I began to understand both the depth of knowledge within academia and the growing need for information in industry. This gap eventually led to the founding of Ethical Intelligence, however I would not define it as the sole inspiration behind the company. I believe that there is something inherently beautiful about being human, in the messy way we approach challenges, learn through the hard experiences, and support each other through genuine connection. Morality is something I would add to this list, which I believe must be supported and protected by ensuring both an ethical approach to technology, but also approaching the potential influence we have through technology over others with the respect it requires. This, bringing the human back into the central focus of our technology, is the driving force behind the work we do with Ethical Intelligence.

You've shared in the past that growing up in Silicon Valley shaped your views about technology and the tech industry. Can you say more about how this experience shaped you and informs your work today?

Growing up in the Silicon Valley absolutely shaped who I am today, for better or for worst. In one way, it instilled in me a strong technical literacy. That was inevitable considering the Valley is a bit of a bubble where the surrounding neighborhoods become the guinea pigs for testing new tech. Being surrounded by startups whose missions were to change the world, however ironic this may have turned out to be, also helped plant the seed in my mind that I could in fact make a difference in some way as long as I tried hard enough.

Even though I credit the Silicon Valley with fostering the ambition I hold today, there was of course a dark side to it all. Technological application, I would like to think, is meant to benefit and improve our lives, but more often than not I saw how detrimental the wrong application can be on someone's life. I grew up in the heart of solutionism, which eventually led to this growing frustration I had when it came to tech. If these startups and giants alike were claiming to change the world, then why was I left with a feeling that this was an empty promise only to be filled with yet another useless gadget I needed to purchase in order to fit in. It is this frustration in a way that has inspired my drive to, actually, make a difference in tech by bringing human values back into the center of things. I believe that the only way to create technology that can truly change the world, and not just for the little bubble in California, is to develop a culturally diverse understanding of ethics.

Most of your work these days takes place in the European Union, which tends to be a few years ahead of the US in terms of technology policy and regulation. What do you foresee being the next frontier of tech policy in Europe?

AI will be the next frontier of tech policy in Europe, and truthfully already is. So far Artificial Intelligence has gone generally unregulated with only a few exceptions of legislation beginning to touch on the outer edges of its influence. Currently there is a strong debate happening that centers around the question of whether or not we really do need new legislation, or if we can apply previous laws to AI. The concern is that the European Union claims it wants to be a leader in AI innovation, but will seriously stunt this endeavor if the EU favors an over-regulated position.

In addition to tech policy covering AI in general, the EU is putting significant emphasis on the ethics of this technology. The EU already has a guideline for ethics, a guideline which is quickly moving into regulation in the upcoming years. The purpose of this is to ensure that whatever way the EU contributes to the development of AI results in responsible and human-centric technology. And as we have seen, just because it is only an EU regulation doesn't mean the influence ends at the border.

What are some of the cultural or social differences that you've observed between how Europeans and Americans view tech ethics?

Generally speaking, Europeans tend to be more communal focused while Americans tend to be more individualistic. This translates into an interesting divide between how Europeans and Americans approach technology. Europeans tend to have a stronger awareness around how their actions impact others in their society, so they are motivated to act in certain ways given the societal benefits they perceive are associated with that action. This means they are, generally speaking, more open to the thought of pursuing certain ethical principles in technology and are intrinsically motivated to do so. Americans, on the other hand, tend to view technology as something that can be used to turn a profit for themselves, which means their motivation tends to be tied closely with what kind of monetary value is assigned to something. Since ethics in tech is a fairly new topic and therefore does not have a clearly direction correlation between it and increasing profit, there is less motivation or sense of need to pursue ethics in tech.

Connect with Olivia at @oliviagambelin

KRISTINE GLORIA

Dr. Kristine Gloria leads the Aspen Institute's Emergent and Intelligent Technologies Initiative*. She holds a PhD in Cognitive Science and an MA in Media Studies, and her past work includes research at MIT's Internet Policy Research Initiative, the Startup Policy Lab, and the Center for Society, Technology, and Policy at UC Berkeley. Kristine sat down with Andrew from All Tech Is Human to discuss the future of the web and what social

distancing is teaching us about our relationship with technology.

You have degrees in journalism, media studies, and cognitive science. How does the unique combination of these disciplines inform your approach to emerging technologies?

Kristine: Great question. I often describe my non-traditional, multi-discipline professional path as one driven largely and deliberately by curiosity. In each learning experience - whether in journalism or cognitive science - you learn a set of skills that are agnostic to the discipline itself. As a communications - or journalism / media studies major - I can draw on my experience of asking pertinent, probing questions about emerging technologies. And then, most critically, be able to communicate this with various audiences. As a cognitive scientist, I consider human behavioral aspects and technical implementations that arise in the design of these technologies.

Take for example a fitness tracker, like a FitBit or Apple Health. Each of these may nudge users to get up and walk around after a certain amount of being sedentary. These systems use heuristics, such as your heartbeat and step count - aka individual behavior - to inform the nudge mechanism. Examples at this intersection are numerous and increasingly becoming more embedded into our daily lives. And, as these systems become more complex and technology more advanced, it is critical that our society cultivate and support more holistic, 365-degree thinkers that can explore issues in-depth and across multiple domains.

Much of your research has focused on web science, the study of the world wide web. In your opinion, what are some of the most interesting challenges that researchers and engineers are wrestling with today about the future of the web?

In Web Science, the focus is to unpack the “socio-technical” characteristics that made the Web both society’s greatest innovation engine while simultaneously exposing some of humanity’s darkest qualities. To that extent, some of the most interesting challenges for the future of the web are inextricably intertwined social and technical concerns. Issues like cybersecurity, privacy, packet-stability, etc., are questions that toggle between technical issues and socio-economic considerations. It is both a recursive and iterative design process.

Take for example the current debate over an increase in surveillance technologies used during the COVID-pandemic. Technically, we can and have developed systems that enable location tracking, facial recognition, heat signatures, etc. We can also, to some degree, anonymize and protect privacy leveraging numerous technical techniques. Yet, is the trade-off between increased surveillance technologies and individual privacy norms worth it? The answer has always been, it depends. When we come around to the other side of this crisis, I think we’ll have much more to reconsider regarding future norms and behaviors around technology.

You’ve lately been focusing on the convergence of emerging technologies and their implications on society. What are some of the questions that you’re looking to answer with this work?

First and foremost, it’s always about teasing out the hype from the reality. Just like the recent uptick of “artificial intelligence,” otherwise known as improved techniques involving big data and machine learning, the real task is to ground our understanding in what is available, what and who will it impact, and what is on the horizon (in 5, 10, 15 years). Now, emerging technologies like AI, 5G, augmented reality, quantum, etc., have the potential to be individually disruptive across verticals and domains. But, what happens when these technologies converge?

Imagine a fully wired 5G environment littered with smart sensors whose algorithms are optimized and personalized to support an augmented urban-living experience. What are the opportunities and costs of this type of future? How does this impact different demographics? Will this type of experience be equitable and inclusive? Privacy typically gets top billing here, but I am also personally curious about its impact on our cognitive and emotional development. The latter seems to be ripe for additional exploration, and as a mother of two young children, I’m biased in my pursuits to understand the potential for their future interactions with technology.

You recently produced a webinar exploring how communication technologies like Zoom or FaceTime affect the human condition during times of social isolation. What were some of your main takeaways from that conversation?

Surprisingly, and perhaps this is more telling about my own personality, a main takeaway from this conversation (which featured Danielle Baskin, David Brooks and Mohamed Abdel-Kader) is the many different ways people are making deep, meaningful connections despite the physical distance. People are social creatures; and with many of our traditional opportunities to gather being canceled and or closed, the digital world offers an interesting alternative. Sure, distance learning and virtual worlds (like Second Life) are not new; but I find it fascinating to witness the efforts made by others – whether by cloud raves or digital happy hours – to connect in innovative ways.

Naturally, it then begs the question of whether this new normal is both sustainable and or healthy for human connections and social well-being. At least for the moment, technology serves to augment and support human connection; not be its replacement – a sentiment echoed by all three panelists. The hope is that after the crisis ends, people are able to (or want to) transfer the connections offline. For me, this pandemic is opening up and accelerating issues around technology’s impact on our society, like mass surveillance; automation and the future of work; healthcare and AI. The key will be how do humans (society) respond to the impact and will it change the design of the technologies we create.

Connect with Kristine on [LinkedIn](#) | *Kristine Gloria currently has a different role with Aspen Institute.



MILENA PRIBIĆ

Milena Pribić is an advisory designer on the IBM Design for AI team and the co-author of *Everyday Ethics for AI*. She is passionate about creating and scaling resources on ethical AI for designers and developers and has spoken about AI ethics and design to diverse, international audiences. Andrew from *All Tech Is Human* spoke with Milena about her experience as an ethical change agent in a large tech company, AI ethics in the midst of the COVID-19 pandemic, and more.

You started at IBM 5 years ago as a product designer. Tell us about your journey from there to your current work in AI design and ethics. In particular: what first inspired you to think critically about the ethics of AI design?

I started at IBM as a developer and pivoted to design on my own. I started thinking about AI ethics as I was designing the personality of an AI tutor a few years ago. It struck me how subtle improvements in voice and tone drastically altered the students' perception of the tutor and their engagement—the dynamic between student and tutor shifted so quickly. The students started referring to the tutor like it was a real person and I just had a moment of... is this normal? Are they aware that they're in the driver's seat? Transparency is foundational to trust. And a healthy dynamic means continued interactions means improved technology over time. If you're working with AI, you're a relationship designer. It's your job to make sure it's a healthy one.

You're a co-author of *Everyday Ethics for Artificial Intelligence*, a guide to ethical AI design and development. What was the impetus for this project, and what changes have you seen take place within IBM as a result of it?

We needed a resource that any member of a team could pick up and point to when they came across situations like I did with the AI tutor. We've always called *Everyday Ethics* the first step in the process because it's meant for group discussion but also offers specific resources and to-dos without feeling like a checklist. The guide was originally created for designers and developers but as we wrote it, it became clear that it would be useful for any role.

The guide was published in 2018, so a lot has evolved since then in terms of how plugged in the designers are. There were passionate people across the company who were already doing cool things in the space so they were some of the first to rally around the guide. There's a system of governance and standards that's crucial to any (large) company but it's also important to foster a community organically. I sit with a birds eye view to all of the teams but I'll facilitate collaboration and critiques, or I'll pull in IBM Research to share their ethical expertise with the designers. But ultimately, it's the individual designers on those teams that know their users the best — and it's been rewarding to watch them realize the gravity of that responsibility and encourage the rest of their team to start thinking that way as well.

In *Everyday Ethics for Artificial Intelligence*, you identify five areas of ethical focus for AI: Accountability, Value Alignment, Explainability, Fairness, and User Data Rights. How did you and your colleagues arrive at these 5 areas? Which area(s) do you feel are most often missed by AI designers, and why?

We were super inspired by IEEE's *Ethically Aligned Design* and wanted to create a digestible version of that in our own voice. We worked closely with Francesca Rossi, IBM's Global AI Ethics Ambassador, to narrow the focal points down to what we felt were the most pressing and relevant ones.

It's hard to say which is most often missed by AI designers since all five of the focus areas are intertwined and dependent on one another. The problem is usually not a matter of missing one or the other, it's more about how deeply each area is addressed within an actual design process. You can't just read the guide and check it off the list, or have a conversation about it at the proverbial water cooler and go on about your day. This type of work and thinking is a daily practice. If you're not actively incorporating those ethical insights into your design decisions, you're not internalizing them. All of this work is about behavior change for practitioners. It has to become like muscle memory!

What advice would you give to someone who's looking to spearhead ethical change within their own company?


Think about it like this: every AI job is now an AI ethics job. If you're really thinking in a human-centered way, you don't need permission to start designing better experiences that are rooted in building trust. See how you can leverage or build on what's already available (like Kat Zhou's design thinking exercises). Take our *Everyday Ethics* guide or use it as a jumping off point to write your own. Find other people like you. The most passionate collaborators are those that carve out the time and resources to address ethical questions for their particular domain. From there, what sticks and scales to different scenarios? An internal AI ethics community could start with a Slack channel where you can share your experiences with each other.

What unanswered questions have been on your mind lately regarding AI or design ethics? What type of work needs to be done to answer them?

Since my team is focused on human/AI relationships, I've always been interested in power dynamics and how we define them for different use cases. Humans are so weird. We're full of contradictions when it comes to those questions on healthy/optimal relationships. I'll loop in with anthropologists, trust researchers, and even moral philosophers to discuss and share notes. We have to keep pulling in experts from different disciplines as primary collaborators.

The COVID-19 pandemic has taken up the majority of my brainspace lately like it has for all of us. How do we protect citizens from the virus while also making sure we protect them from potentially overarching surveillance? What makes a healthy human/AI relationship in a time of crisis? People who rely solely on technology to save the day don't realize that AI tech is initially an empty vessel that's meaningless without the context and the values we assign to it. As designers, we have a lot of power in defining those values in the best interest of our users. Remember that responsibility as you design these experiences— the human has to be prioritized over the technology every step of the way.

Connect with Milena at @milenaqribic

A portrait of Fiona J. McEvoy, a woman with shoulder-length blonde hair, wearing a teal top with puffed sleeves. She is looking slightly to the right of the camera with a gentle smile.

FIONA J. MCEVOY

Fiona J. McEvoy is an AI ethics writer, researcher, speaker, and thought leader and founder of the popular website [YouTheData.com](https://www.youthedata.com). She has been named one of the 30 Women Influencing AI in SF (RE•WORK) and one of the 100 Brilliant Women in AI Ethics (Lighthouse3). Fiona contributes often to outlets like Slate, VentureBeat, and The Next Web and regularly presents her ideas at conferences around the globe. Andrew from ATIH sat

down with her to discuss how her humanities background influences her work, what tough questions she's tackling these days, and more.

Tell us about your journey into the tech ethics world.

Fiona: I took a career break to go to grad school and study philosophy. While I was there I became interested in a host of new ideas, but landed up focusing on some of the main ethical and moral considerations for new technology. I wrote my thesis on how big data can be deployed to restrict human autonomy, and I've been writing and thinking about these topics ever since. My blog, [YouTheData.com](https://www.youthedata.com), has been a great outlet for me to think about the way technology is changing the human experience. I'm really gratified that others have found it thought provoking enough to ask me to write and speak publicly on these subjects.

You hold degrees in classical studies, english literature, and philosophy.

How does your humanities education influence your approach to tech ethics work today?

The road that has brought me to tech ethics has been winding, but the common thread has been an interest in human beings and the civilizations we create. I believe that having an arts and humanities background is actually a huge asset when it comes to examining this new technological epoch within its broader historical and cultural context.

On the one hand, I have quite literally written about technology with reference to the creative process, Shakespeare, the Stoics, and Aristotelian ethics (among others). But outside of those direct references I believe my early immersion in the humanities helped me acquire a broad and useful understanding of human motivations, incentives, organization, hierarchy, behaviors, relationships and, of course, how new things can change our societies and our lives as individuals. Very few sequential evolutions are entirely unique, and in anticipating harm it can be as helpful to look backwards as it is to look forwards.

In addition to your popular work as a keynote speaker and author at YouTheData.com, you recently published a number of articles in academic journals. How have you seen the conversation around tech ethics change in academia in recent years?

I cannot claim to be right at the heart of the current tech ethics conversation in academia, but I'm certainly buoyed to see a growing number of opportunities for scholars wishing to write and speak on the topic; the corollary being that there are now more resources for people like me to draw down on. There have always been excellent academic voices at the heart of the dialectic -- like Shannon Vallor and Luciano Floridi -- but now the conversation is becoming both broader and deeper, with many more participants.

On a personal level, my forthcoming paper is about the plight of human autonomy as we embrace deeper and deeper levels of technological immersion, like with AR and VR. Not long ago, this would have seemed like an extremely niche topic, but I'm encouraged by the interest and discussions I've had over the last year or so; I put it down to the intensifying interest in tech ethics of late and the growing realization that these topics are among the most important facing humanity.

What are some tough questions related to AI or data ethics that you haven't found satisfying answers for yet? What kind of work do you think needs to be done to answer them?

The work I do doesn't provide answers and I am rarely prescriptive about courses of action. In scholarly research, I simply try to identify where problems may arise and I do something similar in my other commentary. As unhelpful as that might sound, I've been pretty quick out of the blocks in publicly discussing the inherent problems with technologies like deepfakes and emotion AI. Part of the process of finding a solution is recognizing the problem to begin with. Some of the biggest tech catastrophes we've had so far are the result of attitudinal negligence when it comes to forecasting bad outcomes.

From my observation point, there's still a long way before we can say we've found a solution to fully mitigate even the most discussed tech-driven harms, like algorithmic bias. In fact, the list of technologies that have not been satisfactorily evaluated for their potent effects is far too long. We already live with AI driven-artefacts and platforms that discriminate, infringe on our privacy, subtly manipulate decision-making, steal personal data, and deceive us. All with unknown downstream effects for our behaviors and mental health.

It strikes me that there is work to be done on all fronts here. Sometimes it will be about finding solutions, but there is a whole body of work in determining which types of technology should be tightly controlled or entirely suppressed in their deployment.

Connect with Fiona at @fionajmcevoy & YouTheData.com

A close-up photograph of Clara Tsao, a woman with long dark hair, smiling and speaking into a microphone. She is wearing a white jacket over a dark top. The background is dark and out of focus.

CLARA TSAO

Clara Tsao is a national security/disinformation expert and technology entrepreneur currently building an association focused on the trust and safety profession. She is the President of the White House Presidential Innovation Fellows Foundation, is a Senior Advisor at the UN-CTED-backed Tech Against Terrorism, and has held various national security and tech policy roles for the US Government, Google, and Mozilla. Clara

spoke with Andrew from All Tech Is Human about online disinformation, the need for great digital literacy in government, and more.

Much of your current work lies at the intersection of tech and policy, focusing on issues like disinformation and online safety. How did you first become interested in these issues?

Clara: JFK once said, “We choose to go to the moon in this decade and do the other things, not because they are easy, but because they are hard, because that goal will serve to organize and measure the best of our energies and skills, because that challenge is one that we are willing to accept, one we are unwilling to postpone, and one which we intend to win.” In a similar way to how JFK committed the nation to the ambitious goal of landing on the moon, I believe the field of “trust and safety” (including online safety / disinformation), is the most difficult challenge of this decade that technology companies, governments, civil society, and internet users must stand united behind. This is a challenge we need to win. From live-streamed mass

shootings, terrorist content, online sexual exploitation and conspiracy theories, to election interference, there are endless problems that require collaboration, starting with strengthened dialogue.

I have always been fascinated with how people behave online, and I spend my free time evaluating how people behave on social media. I especially love testing and exploring new technology platforms to understand the new ways in which people interact and connect with one another. However, I was first exposed to the offline consequences of fake news and misinformation while I was at Microsoft in early 2014. At Microsoft I was managing a partnership program focused on growing the capacity of libraries in Myanmar to serve as trustworthy information hubs. We piloted new platforms and approaches to tackle digital and information challenges in the lead-up to the country's critical 2015 general elections, the first time the nation could participate in a democratic vote after nearly 50 years of military rule. Over the span of months, I saw firsthand the impact of rampant disinformation as Facebook unintentionally introduced the country to a new digital era that causing offline chaos, violence, and eventually, ethnic genocide.

Years later, I joined the US Government as an Entrepreneur-in-Residence' where I served as the CTO of two teams within the Department of Homeland Security focused on online safety issues, ranging from terrorist use of the internet, to foreign influence operations and election security. Most recently, I worked with human rights defenders, civil society groups, and policy professionals at Mozilla, evaluating regulatory policies and tools around harmful content online. My passion for problem solving in this space was cultivated by these experiences.

What particular questions/challenges have you been tackling recently, and why is now the right time to address these?

Over the last year, I have been building a new organization to support and advance the trust and safety profession through a shared community of practice. Today the biggest challenge in trust and safety is the lack of formalized training and support for the professionals that determine and enforce acceptable content policies and behavior online. Professionals working in trust and safety teams at technology companies are tasked with adjudicating what is acceptable behavior or content, while also protecting free speech, user safety, and society. Trust and safety teams are also asked to make difficult decisions to protect users, while also having limited support from product and engineering teams to carry out and enforce these policies at scale.

There has never been a better time to support trust and safety professionals and to do their best work. Due to recent media coverage of content moderation, there has been more awareness of the psychological and mental health risks associated with content review that impact employee wellness. As fake news and misinformation has gone rampant in election processes, governments around the world have threatened regulation or fines for the inability of timely content review and removal. Some countries, like Germany, have introduced and are enforcing such regulations. Hate speech that stays online in Germany for more than 24 hours can accrue a fine of €50 million under *Netzwerkdurchsetzungsgesetz*. Examples like these have led companies to invest more resources in their trust and safety operations and have more transparency in their decision-making practices.

Furthermore, technology companies are increasingly realizing the impact that toxic users and behavior have on “user churn” and bottom line. Advertisers like Unilever have threatened to take their marketing budgets elsewhere if platforms don't mitigate the spread of toxic content or toxic users.

Are certain types of misinformation more dangerous than others? What criteria should companies use to evaluate whether a piece of content should be removed from their platform as misinformation?

The perceived danger of misleading content is a key element that influences the way many companies prioritize and investigate removal. Misinformation can include false or misleading information, ranging from rumors, gossip, errors, to propaganda. While misinformation can be harmless (i.e. married celebrity having an affair), information can become dangerous when the content has offline or behavioral consequences for users and goes viral (i.e. drinking diluted bleach will prevent you from COVID-19 infections). When evaluating misinformation, companies can evaluate the actor behind the campaign, the behavior of the post (is it a bot network?), and the context of the content to determine how to prioritize removal. Other times, misinformation is automatically detected by AI/machine learning or flagged manually by users reporting the post.

Continued on next page



One challenging part of misinformation is when content is further bolstered by recommendation engines and algorithms, originally designed to heighten user engagement but now leaving users in partisan and polarized filter bubbles. When someone searches for content reinforcing fake science such as the flat earth theory, they become stuck in a “rabbit hole” of other conspiracy theories unknowingly, of which many include content from the anti vaccine movement. To counteract this, AI researchers like Guillaume Chaslot have advocated internet platforms to have increased algorithmic transparency.

What are some tough questions in the civic tech world that you haven’t found satisfying answers for yet? What kind of work do you think needs to be done to answer them?

One of the hardest questions in civic tech is “Why is it so hard for cities and governments to upgrade to a modern digital infrastructure and to understand technology?” For starters, the gerontocracy of political leadership has led to a growing digital divide in Capitol Hill, city halls, and federal agencies. Additionally, outdated legislation often hurts the ability to evaluate the poor implementation and quality of legacy systems and allow them to be more human-centered and agile. For example, the Paperwork Reduction Act of 1995 makes it near-impossible for most digital teams to conduct user-centered research and ask questions about usability. Additionally, most government teams have limited IT budgets, often locked into contracts using legacy systems and run by staff incentivized by their own job security to maintain the status quo.

The ability to recruit talented new technologists is not easy either. For highly sought after software engineers, it is difficult for federal and local governments to match the salary, benefits, and “cool factor” of major technology companies. For entrepreneurs that are building civic tech solutions, the procurement timeline is often so long or so complex, often startups do not have the runway to survive before the contract is awarded. The continued use of legacy systems is leading to disastrous impacts. With many people going on unemployment due to COVID-19, local governments are struggling to maintain systems due to a scarcity of available COBOL programmers and the volume of demand and usage. COBOL is a 60-year old programming language that many state-level unemployment benefits systems are built on.


To solve this, more companies should allow talented technology employees interested in the public sector to take “civic leave” and go into technology positions in government through programs such as PIF, USDS, Code For America, or Tech Congress to help upgrade outdated technology systems and build products in a more human-centered, data driven, and agile way. Equivalently, it is just as important for policymakers to spend time in the technology/private sector to understand product and policy challenges from the perspective of companies. Additionally, it is important to support, encourage, and elect more diverse and tech-savvy newcomers to run for office and hold leadership positions.

How do you feel about the current relationship between technology, tech companies, and policymakers? How do you think these relationships will change in the future?

Today there is growing hostility between Silicon Valley technology companies and Washington, especially around critical national security challenges and ethical concerns. Most governments see technology and innovation as key strategic assets for competitive advantage against other countries. However, many developers in the open source community view technology as something meant to be free and open, rather than potentially weaponized for use by the Pentagon. At present many technologists struggle to understand international power politics and appropriate actions towards regulation. Reversely, policymakers fail to legislate coherent policies to govern technology companies and protect user privacy and safety. To change this for the future, we need to encourage more technologists to lend their expertise to support better policy-making, through incubators like Aspen’s Tech Policy Hub. Equivalently, more public policy experts should deepen their product management experience to translate their concerns coherently to Silicon Valley.

Connect with Clara at @tweetclarita

Connect with the Trust & Safety Professional Association at tspa.info



CENNYDD BOWLES

Cennydd Bowles is a visionary leader in ethical product, UX, and futures design. The author of two books (*Future Ethics* and *Undercover User Experience Design*) and former design manager at Twitter UK, he now spends his time speaking and leading training workshops on the ethics of emerging technology at organizations like Microsoft, Stanford, Google, IBM, and Capital One. Cennydd spoke with Andrew from All Tech Is Human about the

responsibility that designers have in the creation of ethical technologies.

How and why did you first become passionate about the need to think critically and thoughtfully about technology?

During my final year at Twitter. I joined in 2012, when the industry and company alike were on an upswing. The story was that technology had emerged as a triumph of the Arab Spring, a means for citizens to uproot the hierarchies and autocracies of the past. Technoutopianism was the default perspective through the industry, even more so than today. Of course, things didn't turn out so rosily. Social media did indeed uproot some hierarchies, but the ensuing entropic chaos is no better: the powerful and ill-intentioned have found ways to exploit it in dangerous ways.

I was also saddened by the company's shortcomings on abuse, particularly during Gamergate. Gamergate was a trolling campaign in 2014/5 aimed at women in the gaming industry, conducted largely on Twitter, that essentially



forged an abuse blueprint for what became the alt-right. It struck me that we – and the industry at large – were failing in our responsibilities toward vulnerable users.

I left Twitter in 2015, and then pursued a career of sorts in the field of ethical technology.

Is it important for the general population to attain a certain level of “AI literacy” in order to make sense of a world increasingly driven by algorithms? If so, how can people go about this?

No. It’s up to us to make technologies that people can interrogate and understand. The common counter is that certain machine learning systems, particularly deep learning, are mathematically impenetrable: it’s no good exposing the decision architecture, since all we end up with is a series of neuron weightings, which no human could claim to make sense of. If that’s truly the case (and there are many people working on explainable AI / XAI who disagree), then in my view we shouldn’t use these systems for decisions that impact human freedom or flourishing, such as sentencing or hiring choices.

It seems that designers are in many cases at the forefront of the tech ethics movement. Why do you think this is the case?

All design involves futures, and all futures involve ethics. When you design, you’re making a claim about how we should interact with a future object, and by extension, how we should interact with each other. There’s an inherent, inescapable normative angle here: design can’t be separated from its ethical implications.

Also, at the risk of generalisation, I find designers typically have broader motives than profit. The designers I like are those who want to make the world less random and more humane. For these folks, companies are necessary vehicles to deliver on that promise, and profit is a way to sustain that work; smart companies can make good money from hiring these designers to anticipate the future correctly. But I admire the honest arrogance of aiming for something higher, and it makes more fertile ground for the ethical discussion to germinate.

When a technology produces unintended ethical consequences, does it often boil down to a design problem? What part of the responsibility should be borne by the designers of the technology vs. other stakeholders?

It’s often a design problem, yes. But technologies have an annoying habit of distributing or diluting moral responsibility. The products we build today involve multiple stacks, layers, and protocols – hardware architectures, operating systems, platforms, libraries – that it’s sometimes hard to say exactly who’s responsible for what outcome. It leads to an environment of finger-pointing and shirked responsibility.

The way out of this is to take responsibility regardless. In my mind, whichever company is closest to the user is the one ultimately delivering the service, so this team is accountable for the ethics of its products. Your app is only as ethical as the partners who handle your customers’ data are, or the authorities who peek through the backdoors you built for them.

Tough gig, but given how well-compensated and powerful our industry is, it damn well should be a tough gig. Time to justify our status.

Connect with Cennydd at @Cennydd

PEARLÉ NWAEZEIGWÉ

Pearlé Nwaezeigwé is an award-winning Nigerian Attorney specializing in technology, user rights, and artificial intelligence. Her projects have included “Generation AI,” a collaboration with UNICEF and the World Economic Forum, and Beyond Le Code, a podcast about the effect of emerging technologies on marginalized groups and society as a whole. Andrew from All Tech Is Human sat down with Pearlé to discuss good personal data habits and diversity & inclusion in tech.

How does your upbringing inform how you understand your relationship with technology today?

Back in college, I studied human rights and I have always been passionate about the traditional issues like migration, gender inequality, poverty reduction, etc. I was a huge fan of Model UN, which gave me a global perspective to think beyond my country. Applying it now to new technologies was an easy transition. Researching and speaking out about the protection of digital rights such as free expression and right to privacy narrowed my scope in my pursuit to become a human rights expert.

What are some good personal data habits that people should implement in their day-to-day lives?

With the release of statutory laws like GDPR and the CCPA, data ownership is heavily promoted. I wrote an article on the CCPA called “Personal Data is Deeply Personal” which highlights practical tips for users to protect their

data online. There are easy things, like making sure that the sites you're browsing are "https" rather than "http," as these servers are more secure. Or, when a pop-up comes on prompting you to opt-out from data collection or cookies, take the time to read and consent to opting out.

Another good practice is to make sure that you always use strong passwords. Consider using a password manager that can generate new passwords that are more than 15 characters. Multi factor authorization, where a code is sent to your phone to ensure your identity after sign in, is a good way to keep your accounts secure. Also, don't underestimate the importance of updating your operating software and apps: new updates provide better security patches to protect your phone or laptop from the latest vulnerabilities.

Do tech companies like Facebook and Twitter have a responsibility to police misinformation on their platforms? If so, how should they approach this? Is it a problem of design, of incentives, or something else?

Yes, I believe these social media companies do have a level of responsibility to their users to prevent the spread of misinformation. The argument of S.230 – the "safe harbor law" – is rather stale and should be revoked. I am currently researching the "duty of care" principle which can be imposed on social media companies. Prominent scholars have suggested that social media platforms be regarded as public spaces where users congregate to connect and gain information. There are a lot of laws that place a level of responsibility on such spaces to ensure the safety of customers. These same laws can be applied to social media platforms.

What principles do you use to guide your technology consumption & use in your own life?

Putting a clock to my screen time. I realized that I wanted to be on social media and news platforms to be aware of pressing issues, but that these platforms made me less productive.

I decided to be more intentional. I wake up at six am each day and make sure my wifi isn't connected to prevent notification distractions. I spend an hour meditating and praying, setting my goals for the day.

I'm currently reading a book Digital Minimalism by Cal Newport, which provides insights on why we are hooked on our gadgets and how to stay off of them except when necessary. Now when I'm on the bus or train, I don't look at my phone to keep me occupied. Instead, I carry a book or magazine to unplug. I create Lists on my Twitter profile, that way I don't have to go through my timeline perpetually. Instead, I go through specific tweets to get the news or updates that I need to stay informed.

Why do tech companies continue to struggle with diversity & inclusion?

Tech companies continue to struggle with diversity because they believe that qualified people of color do not exist. Fun fact, we actually do. Further, many tech companies promote D&I for the sake of promotion. In my experience interviewing with big tech, they like to show that they had people of color in the pipeline but they don't end up hiring them.

Thanks to the media and the portrayal of people of color, many managers tend to bring pre-existing biases and preconceived notions into the workplace. I have heard personal stories of candidates changing their names to seem "white" just to get past the resume screen. Many times, I find myself ticking "don't want to identify my race" because I fear being disqualified. Further, I do not want to be considered only to fit their quota of "diversity hires."

Are you optimistic that things can get better?

My journey in the tech policy space has taught me that technology is neither good nor bad; the use of it becomes a problem when it infringes human rights or discriminates against under-represented groups. I feel pretty confident in this era of awakening. Users are becoming more aware of how their data is being shared. Governments are stepping up to introduce regulations in what once seemed to be an unregulated space. Personally, it has been a continued learning experience, reaching out to like-minded professionals and working in groups to effect change not only for this generation, but for the future generation.

Connect with Pearlé at @wayzigway

A portrait of Dan Wu, a man with short dark hair, smiling and wearing a dark blue blazer over a blue and white checkered shirt. He is standing outdoors with a blurred background of trees and lights.

DAN WU

Dan Wu is a Privacy Counsel & Legal Engineer at Immuta, an automated data governance platform for analytics. He's advised Fortune 500 companies, governments, and startups on ethical & agile data strategies and has advocated for data ethics and inclusive urban innovation in TechCrunch, Harvard Business Review, and Bloomberg. Andrew from All Tech Is Human sat down with Dan to discuss tech innovation, social inequality, and AI ethics.

How did you first get into the tech space?

Dan: If I can get into tech, you can. I came into it from a very unlikely path: a PhD in Sociology and Social Policy at the Harvard Kennedy School. Yet throughout grad school, holistic solutions merging law (I also pursued a JD at Harvard Law because I'm a glutton for educational punishment, ha), data/technology, and community organizing excited me. I began exploring how cross-sectoral solutions might form systemic solutions to wicked social problems like housing affordability.

In service of that goal, at Harvard's Innovation Lab, I began to experiment with "housing tech" startups. One became a finalist for the President's Innovation Challenge and the other won a national competition sponsored by Toyota. Both of my products focused on helping renters pool their resources and gain economies of scale to bring down rents. Ultimately, due to my interest in playing a larger role in product and promoting "safer" innovation, I jumped into a role at Immuta. As privacy counsel and legal



engineer, I help research, advise, and educate our customer and product teams on data and AI regulations. By combining law and tech, I help companies nimbly navigate regulatory environments and innovate safely — bridging two worlds that rarely speak to each other.

My big hairy audacious goal would be to help all people live in a world where we can meet our basic needs — like housing and early-childhood education — regardless of their circumstances. That way, more can spend time with loved ones, solve critical problems, and enhance our world's collective ability to make smarter decisions.

Tell us a bit more about your work at Immuta.

Immuta lets companies share data safely and quickly to accelerate ethical analytics and protect trust. All without writing code, our platform helps companies restrict who can access data, applies privacy-protecting algorithms, enables purpose restrictions, and does audit processing.

Given this topical focus, I spend my time thinking about how we can create tools to democratize more to operationalize data ethics and governance so companies are actually walking the walk. I also think a lot about making sure these tools are used to prevent, not accelerate, pre-existing social inequalities and power dynamics, and creating values-driven data cultures that integrate ethical innovation into corporate missions.

Let's talk about social inequality and tech. Are the technological transformations we're experiencing today fundamentally different from those of the past, with regards to how they'll affect the distribution of wealth or opportunity in society? If so, how?

As MIT's Brynjolfsson argues, technological advances have favored highly-skilled, educated workers, which increases inequality. What's different now is likely the speed and intensity at which inequality is growing.

A few factors come to mind in understanding this problem — the first being inequitable impact. Lower-skill routine jobs are far more likely to be harmed. At the same time, wealth growth has been rapid and benefited a shrinking set of people. Brynjolfsson describes this as the “winner-take-all” economy. While more emerging economies around the world are entering the middle class, the top 1% still owns half of the world's entire wealth — one of the highest rates of wealth inequality in recent memory.

The second factor is the inequitable distribution of opportunities. High-skilled entrepreneurs and workers are more likely to come from families whose parents are educated, made more money, and/or lived in better zip codes. Unfortunately, disadvantages start even before one is born. Historical injustices, such as slavery, redlining, and other inequitable acts, mean race, gender, and class are correlated with key predictors of advantage.

Finally, we have to think about inequitable power relations. Political scientists from Stanford to Princeton, argue that those with the most opportunities tend to “hoard” or “rig” opportunities in their favor. For instance, the wealthy have more influence over policy through campaign contributions, lobbying, and other expensive tools, while the voice of the poor and middle-class are much less likely to have influence. Patents, copyrights, antitrust, corporate governance, and macroeconomic laws tend to protect “redistribute upward” and bolster the market power of wealthy or elite actors.

In the end, emerging technologies like artificial intelligence intensify these three levers. Consider, for instance, “surveillance capitalism,” the use of technologies to observe, predict, and modify behavior in the direction of those who have the resources to wield them. Furthermore, algorithms to manage workers, basic services, and other opportunity-defining institutions, such as criminal sentencing, have already discriminated against vulnerable communities, reinforcing historical power imbalances. Finally, as a variety of critics have voiced, who gets to decide which problems are solved and how we solve them? For more on these themes, read AI Now's powerful report.

As a result, technology is extremely unlikely to close disparities by itself — and will, more likely than not, widen inequality. But paired with new political coalitions, laws, and institutions, innovation, including technological ones, can certainly hasten equity. When the marginalized, the middle class, and other allies co-create new ideas, these interventions build collective power and bolster innovation and autonomy. Some examples include Brazil's participatory budgeting program or community land trusts and cooperatives.



What are some of the most important principles for technologists to keep in mind with regards to AI ethics?

Before I begin, it's worth considering why these principles and, more importantly, enforceable rules and accountability are critical. It's summed up as: "the road to hell is paved with good intentions." Case in point: Denying treatment to African Americans suffering from Syphilis due to the government's desire to innovate treatments for that very disease. Even the best interventions can harm stakeholder trust, if not done in an ethical way.

There are three types of principles to consider here. The first is what's stated in key emerging data regulations like the EU's General Data Protection Regulation and frameworks like data protection by design. We've started building consensus around the importance of things like purpose limitation, minimisation, transparency, confidentiality, and accountability. Check out the UK's data protection authority for more information about this.

The second is what's vaguely called "ethics," which is a discussion of what should be done outside of stated rules to protect and benefit stakeholders. This includes not just protecting stakeholders (nonmaleficence), but working with them to ameliorate harm (justice) and empowering them (autonomy and beneficence), regardless of what the law says.

Strongly connected to ethics are principles about how ethics and social impact programs enhance strategic competitiveness and trust. For these to succeed, the C-suite must start by taking ethics and compliance seriously. Even the Boston Consulting Group points to trust and privacy as the foundation for "winning" the next decade of wild technological disruption. Purpose-led missions, like Patagonia's, distinguish some of the most innovative companies. Furthermore, trust results in more stakeholder loyalty, resulting in better data, insights, products, and employee productivity.

The third is a critical response to dominant data and ethics practices, such as feminist and postcolonial data studies. The Feminist Data Manifesto pushes technologists to investigate power relations, processes, and history. Practices include the critical interrogation and righting of "neoliberal logics," hierarchy (versus co-constituted relationships), and historical and current injustices against vulnerable communities, often tied to "race, gender, sexuality, class, disability, nationality, and other forms of embodied difference."

Technologists should not stop learning. While I give a landscape of resources and questions above, new harms and opportunities emerge everyday.

Much like a doctor that has to keep up-to-date on the latest medical research, it's also the responsibility of technologists to keep learning, diversify their relationships, and challenge their assumptions. Relatedly, check out Pivot for Humanity, a movement to professionalize technologists and give tech ethics more teeth.

Contact Dan Wu on [LinkedIn](#)

A close-up portrait of Maura Tuohy Di Muro, a woman with blonde hair pulled back, wearing gold-rimmed glasses and a black top. She is smiling warmly at the camera.

MAURA TUOHY DI MURO

Maura Tuohy Di Muro is an aspiring tech ethicist who combats abuse and misinformation online as Head of Product Marketing for Twitter's Health initiative. She's passionate about bringing together the study of technology, law, and anthropology to influence policies and products that serve society. Andrew from All Tech Is Human spoke with Maura about what tech companies can do to prevent their products from being used for harm.

Walk us through your career; how did you first become passionate about the need to think critically and thoughtfully about technology?

Maura: After a short-lived career as a professional ballet dancer, I started my tech journey on the "dark side" of the internet ecosystem, buying digital ads for Microsoft. I went on to drive communication planning globally, living in Australia and building social marketing businesses in the "age of innocence" when social media was nothing but upside.

Joining Mozilla was a turning point for me and the impetus for starting a part time law degree so I could better understand the intersection of technology and regulation. When I had the opportunity to move to Twitter on their Health initiative to combat abuse and misinformation, and work on the front lines of one of the most influential platforms in the world, it was a chance I had to take.

I spent just over a year working in the product organization on Health as a



Strategy & Operations lead, helping establish, scale and integrate organizational practices across product, policy and customer support. Recently, I made the shift to product marketing on Health, also taking on Privacy - two of our biggest priorities at Twitter. Product marketing hits the sweet spot of my professional experience, combining product strategy, customer insight and go-to-market communications. In this role I have the opportunity to weave together the overarching narrative for Health, helping our policy and product teams consider how to message and time their work in a way that regular humans can understand.

Aligning the many teams across Twitter who contribute to Health is no small feat, but it's a top priority, and one the company is invested in getting right.

We have a big election coming up in the United States, with the role of social media companies under scrutiny after 2016, what is Twitter doing to prepare?

As you can imagine this is an incredibly critical focal point at the company, and one we have been working on for some time. In fact, we've supported many global elections since 2016 and are constantly improving and iterating our election integrity work worldwide.

There are an increasing number of verticals that impact election integrity - from preventing account compromise and platform manipulation to detecting misleading information and labeling Government and State Affiliated Accounts to give users more context on the content they're seeing. It is our job to safeguard the public conversation and ensure that people can better interpret the content they're seeing and the accounts sharing it. We understand the responsibility of this task and are committed to getting it right.

Elevating credible information is key. We are partnering with non-partisan organizations to provide people with voter support resources, such as adding reminder prompts within the product experience. While we're not able to publicize everything we're doing, we will absolutely be creating and sharing more resources. We have a significant number of resources dedicated to this work both in the US and globally (including a global team that hand-selects credible political news following public available guidelines), and extending to civic events beyond elections.

How are tech companies adapting their own approach to content moderation?

We are starting to see some real divergence in how different platforms manage their content moderation. Last year, just as Facebook said they would not fact-check political ads, Twitter banned them outright. Platforms like reddit are experimenting with restorative justice programs, where they reach out to people who have had a conflict and see if they can moderate a live discussion to allow Terms of Service violators back on the platform. Twitter is likewise considering how we can make our decision and appeals process more transparent.

What can tech companies do to give voice to underrepresented groups who are affected by their products, but who aren't employees or traditional stakeholders in the company?

As an industry, we have been having a dialogue about ethics and bias in tech and AI/ML for a couple years now, so there's really no excuse not to have addressed this in some meaningful way. We're certainly not perfect at Twitter, but we are taking steps in the right direction. For example, we have an entire department whose job it is to review products for unintended uses, and look at how features' intended benefits could be used to harm other groups -- especially under-represented groups. We also recently formed an Accessibility Center of Excellence that will set goals, drive accountability and serve as strategic consultants to help make all aspects of Twitter accessible to everyone.

We are also launching a program to undertake a sort of assessment on the impact of our products and policies on a macro scale, with a view that Twitter should be contributing to the betterment of society and human rights and not undermining them.

In order to understand the full spectrum of people using Twitter we also need to hire and empower diverse teams. And we need to incentivize all our teams in the right way. We intentionally combined our user growth goals with our "health" goals (anti-abuse and information integrity) so that they would inform each other. What this means in practice is that we cannot launch any product feature that negatively impacts the health of our users.

Connect with Maura at @mtuohy

A portrait of Pamela Pavlisca, a woman with long, wavy, light brown hair, wearing a black top and a necklace. She is looking slightly to the right with a thoughtful expression. The background is blurred with colorful lights.

PAMELA PAVLISCAK

Pamela is a tech emotionographer whose work brings together empathy research, affective computing, and expressive interfaces to make technology more heartfelt and human-kind. She is a faculty member at Pratt Institute in NYC, adviser at the new studio Empathic, and author of the groundbreaking book *Emotionally Intelligent Design*. Pamela sat down with Andrew from *All Tech Is Human* to share her insights into the future of emotionally

intelligent technology and the unique ethical challenges of this emerging field.

What first inspired you to start thinking critically about the need for emotionally-intelligent technology?

As a designer and researcher with a background in human-computer interaction, I didn't start out studying emotion. But every time I looked at how people engaged with technology, there it was. Really, it started with a more personal experience. One day my youngest daughter disappeared into her room with Alexa. Feeling curious, and a little bit guilty, I listened in. I overheard her trying to banter and play as she would with a friend and get frustrated when it didn't go as expected. Apparently, there was some cheating!

Around the same time, I encountered this new wave of technology that aims to understand human emotion. Emotional Artificial intelligence can detect



and interpret a tiny flicker of emotional signal through voice, face, text, or other biometrics. Virtual Reality can help us develop our empathetic skills. And social bots can make our interactions feel more intuitive. I don't think we can solve the emotion gap in technology just by adding more technology, but it certainly compels us to pay more attention to emotion. I'm convinced that future technology will be a—hopefully harmonious—blend of human and machine emotional intelligence.

You've said that we need technology that "respects what it means to be human." Can you give examples of technologies or products that you feel meet this standard?

Technology that recognizes humans as complicated, ever-changing, emotional beings is rare. There are two barriers. First, we can find ourselves in a tech time warp, where we get recommendations based on what we recently did or said and that may not give us space to change and grow. Second, we can feel emotionally drained, or even manipulated. A lot of what we consider engaging design is built of a cycle of negative emotion. For instance, you might turn to a social media app when you are bored. Because the app is designed to temporarily "solve" your boredom in a way that is variable enough to keep you coming back for more, you start to feel guilty or even addicted. And, of course, we know some of the most addictive apps are fueled by more potent negative emotions. Anger is a high activation emotion, and it spreads across social networks easily. This can leave us feeling agitated in the moment and with a kind of rage hangover later.

On the flip side, the most promising products augment human emotional intelligence. The idea that a little self-awareness can help us regulate our emotions is a core concept of emotional intelligence. I'm really encouraged by new wearables and apps that encourage us to actively manage our mental health, especially those like Maslo that combine the self-evaluation of a diary with technology that detects emotion for your own use or for sharing with a coach or therapist. Empathy, emotional and cognitive, is fundamental to emotional intelligence too. Technology that connects people with greater intimacy and compassion is an area where I think we'll see a lot of innovation. BeMyEyes, an app that connects blind and partially sighted people with volunteers, is a great example.

You've been working with empathic technology, sometimes called emotional AI. What are some of the ethical challenges associated with it?

When we are developing technology that taps into something so personal and primal as emotion, it's important to take great care. Emotional AI picks up biological signals, from brainwaves, pulse, skin temperature, tone of voice, facial expression, touch and gait, and translates these to emotion concepts. People are naturally, and sensibly, cautious about this technology. In my research, I've been focused on bringing the concepts to life through simulation or co-creation, so we can understand what the implications might be.

There are a few big panic button issues that come up again and again. One is privacy, or the concern that emotion tech will overtly or covertly detect what we are feeling and reveal too much about our emotional life in unintended or uncontrolled ways. Another is bias, or the worry that human emotion will be modeled in a way that is not inclusive based on limitations of training data and lack of sensitivity to cultural context. More philosophically, there's the concern that the models themselves won't reflect current trends in our understanding of emotion which is less grounded in biology and more in personal, social, and cultural context. Finally, there are existential concerns, or the idea that emotion, like consciousness, is too complex and just too human to be modeled at all.

What advice would you give to technologists who are looking to design more emotionally intelligent products?

One model that I'm shifting toward in my work is to think of designing a product as building a relationship. In a relationship, we have a period where we start to get to know each other, then we build trust as we go along, and we co-create shared ways of being together. This shifts the mental model we have of design in a lot of ways. It moves us toward thinking of people as connected actors with emotional needs and shared interests. It gives us a way to evolve our interactions with a product over time more intuitively. It also serves as an ethical guide grounded in care and a sense of responsibility toward each other.

Connect with Pamela at @paminthelab

A portrait of Carey Jenkins, a woman with long, wavy blonde hair and glasses, smiling. She is wearing a black top. The background is a blurred indoor setting with warm lighting.

CAREY JENKINS

Carey Jenkins is the CEO of Substantial, a Seattle-based product development studio that has worked with organizations as diverse as Amazon, Google, Mercedes Benz, the Gates Foundation, Genentech, and IDEO. She is committed to fostering open dialogue about the influence technology has on our lives and is optimistic that thoughtful, intentional innovation can change the world for the better. Andrew from All Tech Is Human spoke with Carey about what individuals

and companies can do to be responsible stewards of digital technology.

How and why did you first become passionate about the intersection of ethics and technology?

Carey: I became CEO of a technology company that has been designing and building digital products for start-ups and enterprises since 2006. Right as privacy concerns and regulatory efforts were becoming mainstream conversations, my 5 year old was becoming obsessed with screens and apps. Both in my work and my life I was facing a constant drumbeat of questions about the role of technology in our lives. It's becoming increasingly obvious that allowing the biggest technology companies in the world to determine our boundaries, as citizens, parents and businesses, is a mistake we still have time to correct. We shouldn't think of monetization of our data or lost privacy or alternative facts as inevitable. Progress, advances, breakthroughs, and surprises are inevitable, but the way we prepare, interact, direct, create, learn - that is of our choosing. At Substantial, we have the power to be

specific, transparent and protective product creators and technologists. I don't take the responsibility lightly.

Over the past few years, have you seen your clients grow more concerned with understanding the potential negative consequences of their innovations? Why do you think that is?

Honestly, not as much as I would like. But we do feel more comfortable as their partner in bringing issues to light and asking hard questions. And we consider it our responsibility to help our clients envision a successful digital experience that is worthwhile, transparent, and ethical. It's easy to underplay implications when a product is in the early stages. We see now why the technology giants have the power they have but they all started small, with simple ideas, that turned into something else entirely. Technology does not evolve in a straight line; it evolves in all directions. What we offer and learn from the smallest audience is sitting at the center of an idea that could go anywhere.

In the end, people want their business to succeed, to secure more funding, to meet their goals, and success is dependent on engagement and growth. It's our job to show how to achieve high engagement and growth by creating something ethical and valuable that their customers will love.

What can people in innovation roles do to anticipate and prevent possible negative consequences of the technology they're building?

Have the hard conversations. Even experts are taken by surprise at the rate at which technology can evolve. Data collected for reasons that can seem entirely above board can be aggregated in ways that are invasive. What had to shift was the default idea that you capture all data and figure out what to do with it later. And honestly, we will still need regulatory help on that front. I'm not making excuses - I'm just saying that when you think about the implications of your product, you have to account for where the technology could evolve and be intentional and transparent around your boundaries before, during, and after.

What I have seen is tradeoffs being made when the original, simpler, and typically more customer-centric monetization strategy doesn't succeed at the rate the business hoped. That's when alternative monetization strategies, and frankly, ideas that usually bring less value to the customers, start getting prioritized. Be wary of decisions that are worth nothing to the customer now but could "pay off" down the road. Be wary of a growth strategy that is too aggressive for your product to make a meaningful foothold in your customers' need cycle.

Is there an issue in the tech ethics space that you feel isn't getting enough attention? Why do you think it's important?

The environment in which product creators are working, at the macro and micro, affects their perception of ethics, transparency, and responsibility. If you take the largest technology companies and start-ups and compare their environments there are interesting similarities:

- Large percentage of equity in compensation
- Extremely competitive atmosphere
- Huge growth and high turnover
- Constant reorgs and leadership changes
- Low diversity of employees
- High rate of harassment and troubling behavior

This is the environment in which the products we use every single day are created - products that are changing our economy, our attention, our elections, our education, finance and health systems, and how we communicate and connect. We seemed to have decided that is the only environment to grow at the magnitude expected for VC funding and IPOs, for attention and cache. I would argue those environments foster watered down customer focus, incentivization of extreme growth at all costs, siloed transparency and ethics, and little deterrent to decisions with longer term negative consequences. It degrades creativity and innovation, and either burns through talented product people or traps them with golden handcuffs. And more to the point, it has created some of the thorniest equical quandaries of our time.

I consider it a personal mission to lead a technology company that treats our employees, the environment in which we work, our clients, and their customers with care, consideration, and commitment. And I am increasingly hopeful for every conversation, article, conference, and book about the positive force technology can be and how to make that our reality.

Connect with Carey at @Carey_Virginia

A portrait of Kat Zhou, a young woman with long, dark hair, smiling. She is wearing a grey, off-the-shoulder, textured top. The background is a blurred, light-colored wall.

KAT ZHOU

Kat Zhou is a Product Designer at Spotify and the creator of <Design Ethically>, a set of philosophical frameworks and practical tools for ethical design. Her work has inspired crowds of designers and technologists at SXSW, WebExpo, IBM, Duke University, the Harvard Kennedy School, and elsewhere. Andrew from All Tech Is Human sat down with Kat to get her perspective on how tech can move towards greater inclusivity and justice for the vulnerable in society.

How does your upbringing affect how you understand your relationship with technology today?

My Yeye (paternal grandfather) raised me, shaping my childhood with important life lessons masked under mirth and mischief. It was after he passed that I would learn about his own childhood, which was predominantly spent in hiding because the Communist Party targeted his family. When my Yeye was in college, Chairman Mao announced the Hundred Flowers Campaign, encouraging “flowers” (scholars) to give feedback to the Party. My Yeye spoke up, criticizing the Party’s human rights violations. The Party arrested him and other activists, labeled them “Rightists,” and sentenced them to decades of hard labor. My Yeye was set free years later, though the Party has never issued an apology or reparations to the “flowers.”

It is precisely what my Yeye stood up for - the notion every person deserves dignity - that informs my relationship with technology. How does our technology empower and lift up the marginalized?



How does our technology disrupt existing, harmful power structures? How does our technology respect and support our mental health? My own relationship with technology is only one small part of the picture. As someone who works in tech, I have the privilege and responsibility of shaping how others understand their relationships with technology. If I'm not actively considering the aforementioned questions, then I'm not doing my job.

Let's talk more about technology and power structures. Why do tech companies continue to struggle with diversity & inclusion?

Regarding diversity and inclusion (D&I), what happens in the tech industry is merely a reflection of the systemic issues that our societies have reinforced and struggled with for years. Tech companies struggle with diversity and inclusion because, like the surrounding system in which they exist, these companies continually fail to center the marginalized. You can see this struggle in the way that D&I is often treated as a public relations move, rather than a meaningful and genuine effort. You can see this struggle in the fact that oftentimes, leadership in companies overwhelming consists of white men - not to mention the fact that the so-called recruiting pipelines at most prominent companies largely neglect to hire black and brown folks. You can see this struggle in the way that certain products are built and marketed, almost as if marginalized communities were not considered at all in the product life cycle.

Representative Ayanna Pressley once said, "The people closest to the pain should be closest to the power." That is currently not the case in most tech companies. This industry will only continue down its current trajectory until A) it gets properly regulated by governing bodies (which also need reform), B) its employees speak up and insist on change from within, C) marginalized folks are centered (and fairly represented!) with decision-making power in tech companies.

Are the technological transformations we're experiencing today fundamentally different from those of the past, with regards to how they'll affect the distribution of wealth or opportunity in society? If so, how?

I would argue that the technological transformations we see today are more similar than you might think to those of the past. The technologies we've developed have continued to perpetuate existing systems in our society. Yes, in some cases, technology has enabled more reach and access to folks who were historically marginalized. However, technology has also enabled the continuation of racist redlining in cities, allowed for invasive surveillance on citizens, and expanded political polarization and misinformation in countries all around the globe. In each of the situations, those with the least privilege in society are the ones who are most negatively impacted. The technology we've created cannot live up to its potential of leveling the playing field unless we change the existing playing field in which this technology is placed. Existing inequalities will only be magnified at a rapid scale.

As we're building these technological solutions, we need to consider: who's getting first and premium access to these products? Who's mining the metals that create our devices? Who are the passengers, guests, and riders? Who are the drivers, hosts, and chargers? Who are the folks that are doing the surveillance? And who are the ones who are getting surveilled? When we start answering some of these questions, we see that we still have a long way to go before we see net positive changes in the distribution of wealth/opportunity in society at the hands of tech.

What needs to happen to encourage broader mainstream adoption of ethical design frameworks and practices within the field of design?

I think one of the biggest hurdles to broader adoption of ethical design practices (or ethical tech in general) in our field is that we don't prioritize ethical decisions. The tech industry prioritizes financial growth, and sometimes that growth can come with pretty severe costs. Professor Ruha Benjamin (author of "Race After Technology") points out that racism can be profitable in our current society, which is why we see some tech companies selling problematic, predatory software. When we zoom in, we need to ask ourselves, why is it tricky for product teams to wholeheartedly embrace ethical design practices in their sprints? We can see that while those practices often are viewed favorably, they inevitably get rainchecked for other priorities that are more beneficial for those teams to reach certain metrics of success they've already delineated. More often than not, those metrics are directly related to the bottom line.

It's not enough for designers, engineers, and data scientists on the ground to advocate for more ethical practices. It really does have to come from the executive level as well. And more importantly, we need an overhaul of the tech industry (and modern capitalism).

Connect with Kat at katherinemzhou.com & visit DesignEthically.com



THE RADICAL AI PODCAST

The Radical AI Podcast is hosted by Rev. Dylan Doyle-Burke and Jessie J. Smith. Dylan is a former minister and current Religious Studies PhD student at the University of Denver implementing Religious Studies methodology into user-centered technology design practices. Jess is a CS and Information Science PhD student at the University of Colorado Boulder researching ML and AI ethics with an emphasis on multistakeholder algorithmic fairness and transparency.

Tell us about the Radical AI Podcast?

The Radical AI Podcast is one of the largest and fastest growing AI Ethics/Responsible Tech podcasts in the world. Our mission is to be a platform for radical people, radical ideas, and radical stories in the field of AI Ethics/Responsible Tech. What does it mean to be radical in the tech space? That is exactly what we are trying to find out!

We founded Radical AI as a public scholarship non-profit organization focused on centering the voices of those who have been historically marginalized in AI and tech spaces. Specifically, we are dedicated to supporting, sharing, and featuring the stories of people of color, women, and the LGBTQIA community, among others. Our podcast and the organization behind it are driven by values of equity, justice, hope, authenticity, accessibility, and love.

Since launching in April of 2020 we have produced over 40 episodes,



including more than 30 stand-alone interviews, bonus panel conversations, and partnership episodes with groups such as All Tech Is Human, Ethical Intelligence, and others. Our guests and topics have ranged from Dr. Ruha Benjamin of Princeton speaking about racial justice in the tech sector, to Dr. Timnit Gebru of Google AI speaking about critical race theory as it relates to representation in AI design teams, to Dr. Anima Anandkumar speaking about democratizing AI, to everything in between. We are an intentionally interdisciplinary podcast dedicated to making the complex ethical landscape of AI, machine learning, and technology accessible for everyone.

What was the reason for starting your podcast?

It all started when we first met at the FAccT Conference (formerly FAT*) in Barcelona, Spain in February 2020, drawn together by a common interest in AI Ethics and exploring research questions about applying human-centered concepts of fairness to AI design practices.

Bluntly, the podcast was started because of our mutual frustration of the status quo in academia and the tech sector. We had both experienced moments in our academic and industry contexts where interdisciplinary and diverse voices had been implicitly or explicitly silenced. Dylan's positionality as a humanities scholar constantly ostracized in tech spaces and Jessie's experience as a young woman in tech facing down sexism and ageism invited us both to think more deeply about what other voices and stories were not being included in the responsible tech conversation.

As we did more research about podcasts in the AI Ethics space we realized that there was no dedicated space for voices outside of the status quo to have their voices heard by the general public. So we decided to make one.

What have you learned about the Responsible Tech field by running the Radical AI Podcast?

Through our interviews and connections with some of the most respected voices in the Responsible Tech field we have learned quite a bit about where the field has been and where it is going.

The biggest takeaway for us has been learning that the Responsible Tech field is still actively in formation. Though there are many companies and individuals who are leading the way towards defining what Responsible Tech is or is not, that definition is far from stable. In fact, what is clear to us is that we as a Responsible Tech community are in the midst of a vital stage in our development where we are deciding who we will become and what our values are.

A related takeaway is that the Responsible Tech field is not just a single field. Rather, in its current form it is a quintessentially interdisciplinary space. There are engineers, sociologists, anthropologists, computer scientists, psychologists, data scientists, politicians, and so many more -- all who are involved in the Responsible Tech conversation. It is a lively and vigorous space that is transforming daily.

Finally, we have learned that, put simply, there are some amazing, caring, and brilliant people in this space. We have been floored by the level of support we have received from our guests, listeners, and organizational partners. There are many challenges yet to come for the Responsible Tech field but we would be amiss to not point out just how giving, loving, and visionary so many in this community demonstrate themselves to be on a daily basis.

People are looking for entry points into the Responsible Tech ecosystem, and your podcast features many of the leading voices in the field. What have you learned from the podcast that can be advice for others trying to break into the field?

This is the part where we answer in a series of fun clichés.

First - do your research. Don't be afraid to reach out to the people you admire and build relationships; real relationships, not just business relationships where you expect to get something in return. Name what you need and do not be deterred when people say no (you should see the hundreds of rejection letters we have between the two of us!!)

Not a single person who we have featured has what would be considered a 'traditional path' to where they are. It is the weird people and the courageous people and the people who are unafraid about just how passionate and nerdy they are about the Responsible Tech field that make a name for themselves. Don't give up, be at the right place at the right time,

Continued on next page



know clearly what you want, and find a way to get lucky.

And when your luck inevitably runs out, have the audacity to make your own podcast or platform.

Where would you like to see the Responsible Tech field in five years?

The Responsible Tech field is at a tipping point. It will either shrivel and die under the weight of paying lip service to the values that led to its inception or it will bloom and thrive into the sustainable, radically representative human-centered community that we believe it can be. The reality is that the most terrifying thing about this tipping point is also the most empowering; what this field looks like in five years is fully and unapologetically up to us. If you are reading this you have a voice in the development of this field.

The needs of our world necessitate a Responsible Tech field that is willing to look past its own navel to holistically and dynamically engage with the most complex and challenging issues that are facing our communities. We chose the word radical for our podcast because we believe that the tech sector has engaged with these pivotal issues by huddling too close to the safety of the status quo.

We believe we need visionary leaders that are willing to do the uncomfortable work of digging to the root of the problems that negatively impact our most vulnerable communities. And we invite all of you to join with us in doing that work as we journey together towards creating a Responsible Tech field that creates a better and more just world for us all.

Contact Dylan & Jess at [@RadicalAIpod](#) & listen at [RadicalAI.org](#)



KEY TAKEAWAYS

- Diversity breeds responsible innovation. Multiple perspectives improve the ability to consider negative externalities, unintended consequences, and impacts on marginalized communities. **We need an expanded Responsible Tech ecosystem with more backgrounds, disciplines, and lived experiences in order to adequately tackle thorny tech & society issues.**
- Having a non-linear career path into the Responsible Tech ecosystem is not the exception, it is the norm. Many of the individuals who are now working in Responsible Tech have had a range of experiences that have led them to focus on reducing the harms of technology, diversifying the traditional tech pipeline, and ensuring that technology is aligned with the public interest.
- There is a vibrant Responsible Tech community filled with hundreds of organizations and thousands of passionate people from a wide variety of backgrounds. Responsible Tech as an ecosystem is a melting pot of disciplines. The purpose of the Responsible Tech Guide is to both expand the ecosystem and make it more cohesive, creating a culture of knowledge-sharing and collaboration as we co-create a better tech future.
- Our organization, All Tech Is Human, is focused on expanding the nascent Responsible Tech ecosystem through our wide range of activities. These activities fall under three key workstreams; multi-stakeholder convening & community building, multidisciplinary education, and diversifying the traditional tech pipeline.
- The Responsible Tech field continues to rapidly evolve, which is why our organization is structured to be agile and heavily-participatory. No matter your background, experience level, or discipline, there are a vast number of ways to engage both with the community at large and specifically through All Tech Is Human's programs and activities.

WHY BUILDING COMMUNITY IS IMPORTANT

"All Tech Is Human has made me feel that I'm not alone in being in tech, while not directly coding - and that the human side (represented by fields like psychology) is just as important in making sure the internet is less toxic." -**Stephanie Davey, Community Manager at Podium**

"All Tech Is Human exposed me to a world of young people who are about to graduate or newly graduated looking to make a difference and knowing they are being connected with people who are already in positions of influence. I think norm making, especially on a level that requires global buy-in, takes time and is important work. All Tech Is Human is helping develop the kind of norms and values that are currently lacking to guide and govern the future of technology, one that is 'all inclusive'. It is raising the standards on ethics. Technology touches us in all aspects of our life, and all cultures and races." -**Ayca Ariyoruk, Director of Global Partnerships and Communication, Soliya**

"Seeing so many people coming together to consider a more responsible future for technology is majorly inspiring." -**Laure Cast, Head of Research at Marco Polo**

"It has been a useful resource in helping me learn more about responsible tech, as well as providing me with the tools to hold meaningful discussions about responsible tech." -**Rhea Reid, UX designer**

"For a long time I thought I was teaching things people didn't want to hear about or care about and in discovering this community I found so many people who care as I do. I love that people in the community highlight the positives and awesome work people are doing in the tech space while also calling out the injustices, directing attention to problems, and offering solutions." -**Anna Slavina, PhD, UX Researcher**

"All Tech Is Human has exposed me to the wider movement, as previously I had found it hard to find others interested in the topic." -**Zoe Gomez, UX Researcher**

"It has led me to join a community of leading experts across various fields and made them accessible to me." -**Favour Borokini, Research Fellow**

"I love seeing the many backgrounds that are celebrated in this community! Too often we emphasize one field or skillset or degree over others, and I'm energized to see the many perspectives included and empowered. Tech policy needs that!" -**Irene Solaiman, AI Safety & Tech Policy**





WHY BUILDING COMMUNITY IS IMPORTANT

“All Tech Is Human has exposed me to a community of individuals that are committed to ideas and actions that allows for continued innovation while also ensuring that we are moving forward in a responsible manner. It is both refreshing and humbling to see how many people are willing to donate their time and expertise not for personal gain, but to ensure societal wellbeing.” -**Jeff Felice, President, CertNexus**

“It led me to meet so many like-minded individuals and helped me battle imposter syndrome! I realized I was not alone in finding out that many responsible tech jobs are directed towards more senior level people, rather than new grads and it was comforting to know that we are all learning & navigating the world together.” -**Jack Lucas Chang, Data Engineer**

“[All Tech Is Human] has helped to validate my interest and 'place' in this space. When I mention my concerns and interests related to responsible tech innovation, colleagues usually either yawn, tilt their heads or move along. I feel our voices and perspectives belong at the table but not being tech trained it can be intimidating to engage. ATH lights the path!” -**Bonnie Ervin, Change Agent & Educator at Arizona State University**

“My own background and environment I'm embedded in focuses, perhaps overly, on ML and AI. Being a part [of the] All Tech Is Human community has enabled me to get to know of people and work from a much broader background and exposed me to diverse perspectives. I very much appreciate this, and the humility and learning opportunities that come with this diversity.” -**Subhabrata (Subho) Majumdar, Senior Inventive Scientist, AT&T Data Science and AI Research**

“All Tech Is Human has allowed me to meet individuals who share my interest in responsible innovation and come from diverse backgrounds and professions.” -**Tamra Moore, Corporate Counsel, Litigation**

“It has given me a community of like-minded, passionate individuals that motivate me to use the resources around me to make the tech sphere a more sustainable and ethical space. It's taught me that anyone has the power to make a difference!” -**Megan Yu, Salesforce Technical Program Manager, Infrastructure Engineering and Big Data**

MULTISTAKEHOLDER CONVENING

Community Slack group

Summits & mixers

Multi-sector working groups

MULTIDISCIPLINARY EDUCATION

Community reports

University ambassadors

Livestream series

DIVERSIFYING THE PIPELINE

Responsible Tech Guide

Job Board & Talent Pool

Mentorship Program

Our non-profit is committed to co-creating a better tech future, and our wide range of activities are designed to expand & connect the Responsible Tech ecosystem across different stakeholders, disciplines, career levels, and perspectives. Find the most up-to-date version of this guide at ResponsibleTechGuide.com + get involved with us!

