

# Design that Matters

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MIT 6.1040  
Fall 2024



## How this will go

1. Quick-ish introduction
2. Introduction to Responsible Innovation
3. What agency you have in you careers
4. Intro to Social Impact + Practical tools to kickstart your projects (Wednesday)

## Lyel Resner

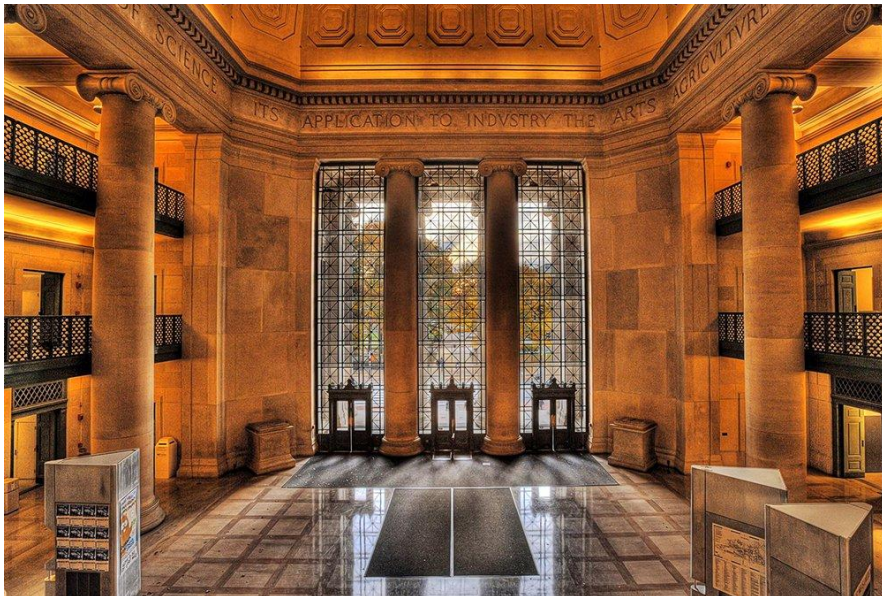


- Visiting Faculty, MIT/ Head of Public Interest Tech Studio, Cornell Tech
- Cofounder
  - Startups & Society Initiative
  - Responsible Innovation Founders Summit
  - Swayable (YC18)
  - Failed Education Non Profit
- Early Exec Flatiron School
- 8y Adjunct Professor of Social Innovation at NYU
- Recovering Physicist/Trader
- Marginally competent surfer



“  
*This, I submit, is the freedom of a real education...  
You get to consciously decide what has meaning and  
what doesn't. You get to decide what to worship.*

“  
*a close-mindedness that amounts to an  
imprisonment so total ...that the prisoner doesn't  
even know he's locked up.”*



 **Prof. Feynman**   
@ProfFeynman

Direction is more important than speed.

12:18 PM · Aug 24, 2023 · **3.1M** Views

 435

 13K

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## Fun with Nomenclature

“Values-sensitive Design”

“Public Interest Tech”

“Ethical Tech”

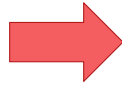
“Civic Tech”

“Responsible Tech”

“Rights-respecting Tech”

“Humane Tech”

“Tech for Good”



1. **Responsible Innovation (Do no harm)**  
*eg. enabling violence and extremism, furthering inequities, perpetuating bias, infringing on privacy, exploiting workers, destroying democracy, etc.*
2. **Social Impact (Create positive social change).** *Advancing Human Rights, achieving UN SDGs*

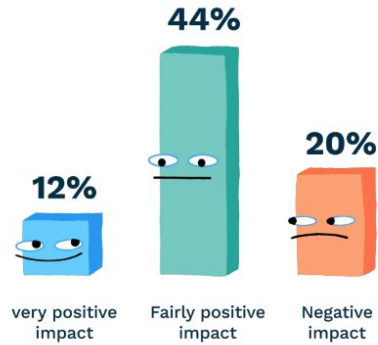
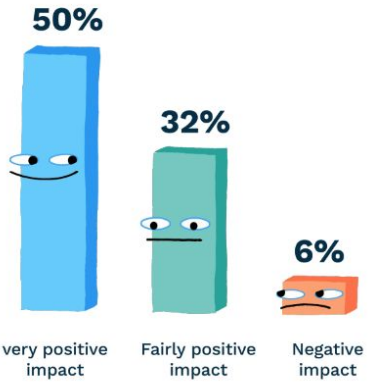


*How positively has the internet affected you as an individual?*

*How positively has the internet affected society?*

How has the internet affected you as an **individual**

How has the internet affected **society**



Credit: <https://doteveryone.org.uk/>

“  
...will create forgetfulness in learners souls.  
Socrates

Source: Ong 2012

**Forbes**

EDITORS' PICK

### Goldman Sachs Predicts 300 Million Jobs Will Be Lost Or Degraded By Artificial Intelligence

Jack Kelly Senior Contributor ◉  
*I write actionable interview, career and salary advice.* [Follow](#)

Mar 31, 2023, 10:48am EDT

Listen to article 9 minutes

“  
*technology's interaction with the social ecology is such that technical developments frequently have environmental, social, and human consequences that go far beyond the immediate purposes of the technical devices and practices themselves*

M. Kranzburg

“

*I lay awake at night thinking about all the things we built in the early days and what we could have done to avoid the product being used this way.*

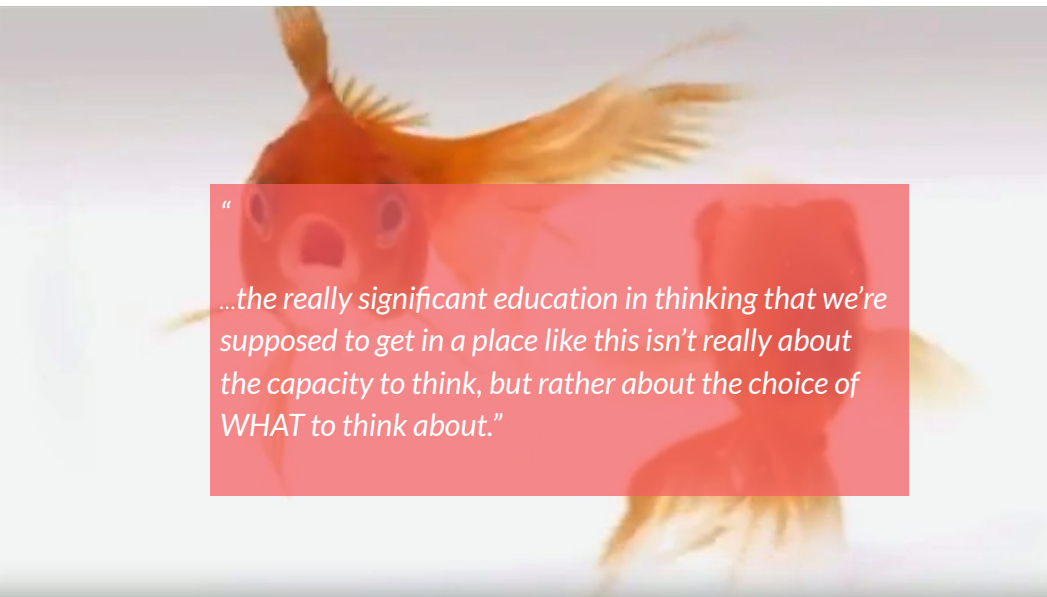
<https://www.vanityfair.com/news/2017/10/ban/facebook-employees-rewrote-the-monster-they-created>, Vanity Fair, Oct. 12, 2017.



Inadvisable  
Responsible Tech  
Strategy

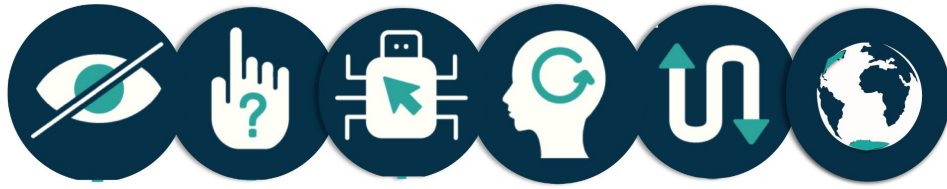


Discuss:  
Can technologists account for  
unintended consequences?



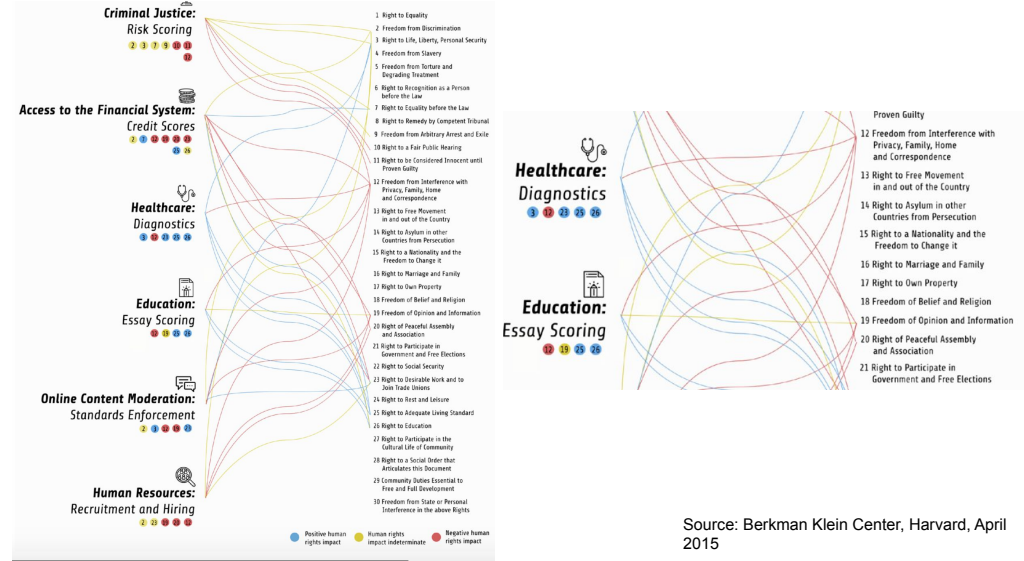
Source: Institute for the Future/Omidiyar, Ethical OS, 2018

# 6 Categories of Unintended Consequences



Lack of Understanding of Value Exchanges    Unintended Uses    Weak Reliability, Security, Monitoring & Support    Changes in Norms & Behaviours    Displacement    Planet

Credit: <https://doteveryone.org.uk/>



Source: Berkman Klein Center, Harvard, April 2015



## This startup has raised \$600 million to give lower-income Americans better healthcare

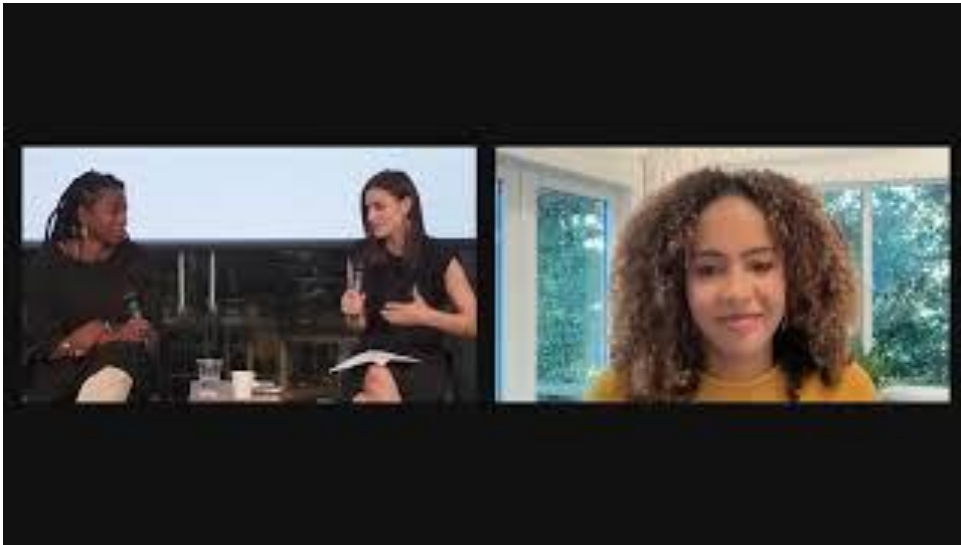
Valued at \$6 billion, Cityblock Health is improving health outcomes for marginalized communities.



Toyin Ajayi Co-founder and CEO, Cityblock Health [Photo: Emma Trim]

## Stakeholders

Employees  
Customers  
Shareholders  
Your Community  
Government  
The Planet  
Other???

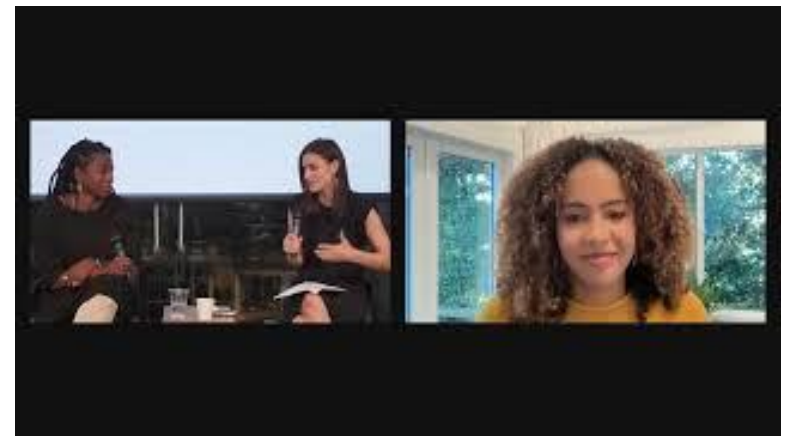


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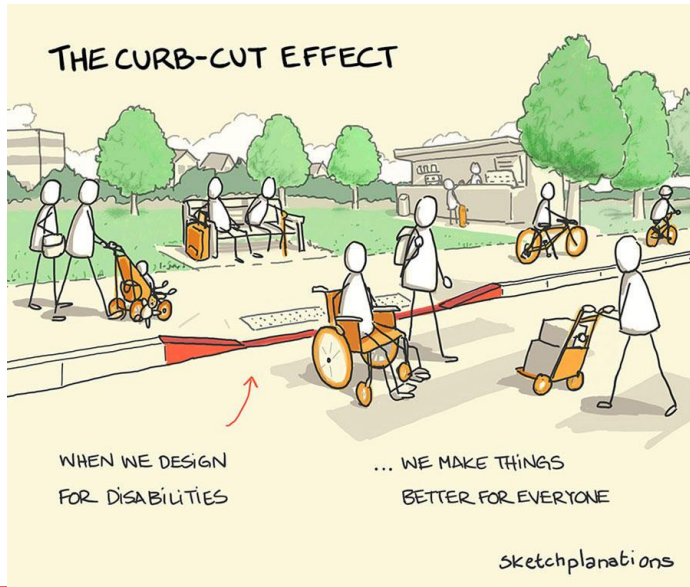
*“Entrepreneurs are the designers of companies. Great startup CEOs recognize very early that their job is not to build a product, but to build a company – defined by mission, values, and culture.”*

*- Phin Barnes,*

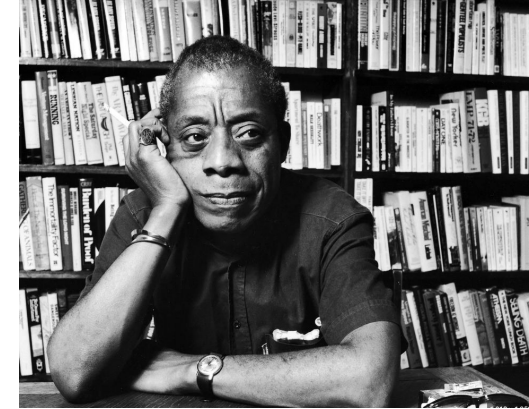
<https://www.vanityfair.com/news/2017/10/barnes-facebook-employees-rewrote-the-monster-they-created>, Vanity Fair, Oct. 12, 2017.







*“What we must understand, is that if I am hungry, you are in danger.”*



## Business Case for Responsible Innovation

**Attract and Retain** top talent  
**Generate** consumer trust and loyalty  
**Build** social capital

→ **Prevent** disasters that cost time, money, and reputation.

# Trend 1: The Talent (YOU) Cares

28% have seen decisions that they felt could have negative consequences for people or society.

63% want more time and resources to think about the impacts of products.

78% would like practical resources to help them



# Trend 2: Growing Public Scrutiny

A collage of news articles and social media posts. At the top left is the NPR logo. Below it is a headline: "Tech Industry Confronts A Backlash Against 'Disruptive Innovation'". To the right is a headline: "How Tech Companies Trust Test" with a sub-headline "The eroding trust in digital platform and limit access to consumer attention". Below these are two articles from the Los Angeles Times: "Rise in consumer 'backlash' against Internet of Things technology" and "HOME TECH ANALYSIS : BUILT TO CONSUMER BACKLASH?". At the bottom is a headline: "Marketers risk a consumer backlash linked to mobile-tech addiction" with a sub-headline "Amid the attention industry at Cannes Lions, former Google design ethicist Tristan Harris and Hearts &amp; Science CEO Scott Hagedorn delivered a warning." On the right side, there is a social media post from Richard Yao with a "Follow" button and the text "Mar 22, 2018 · 7 min read". At the bottom right, there is a section titled "The big tech backlash" with the text "Tech giants are drawing political fire over fake news and Russian meddling".

# Trend 3: Growing Regulatory Scrutiny

## Regulation & Uber, Airbnb & Nest

### Clearview AI Faces Biometric Privacy Claims in Illinois Court

Oct. 26, 2020, 12:15 PM

- Consumers sue over facial recognition tool
- Case differs from others against Clearview



Andrea Vittorio  
Reporter

Clearview AI Inc. must face consumer privacy claims over its facial recognition technology in an Illinois state court after a federal judge sent the case there.

#### Related Articles

REUTERS

World Business Markets E

Forbes

1,268 views | Oct 12, 2020, 01:58pm EDT

## Big Regulation Coming For Big Tech



David G.W. Birch Contributor @ Fintech

Author, advisor and global commentator on digital financial services.

Breaking up Big Tech is a 19th-century competition solution to a 21st-century competition problem. There is a better way.

## The World Wants More Tech Regulation

A large majority of people see an increased need for more government regulation of big technology companies, a new global survey shows.

By Srdia Rado Staff Writer Jan. 15, 2020, at 12:01 a.m.

APAC OCTOBER 11, 2020 / 9:53 PM / UPDATED 16 DAYS AGO

## EU planning tougher regulation for 'tech firms' - FT

GLOBAL TRANSLATIONS

## U.S. playing catch up in regulating Big Tech

"Europe is in the throes of a major revolution" on digital regulation, says one economist.



→ Getting ahead of these issues is a business imperative

“We’re already resource constrained.”  
“We’re still trying to find product market fit.”  
“We’re focussed on making payroll”  
“It’s too early”  
“It’s too hard to predict”  
“What can we realistically do?”  
“We sell X. This doesn’t apply to us.”  
“We’d know if there was an ethical problem.”

## Business Case for Responsible Tech

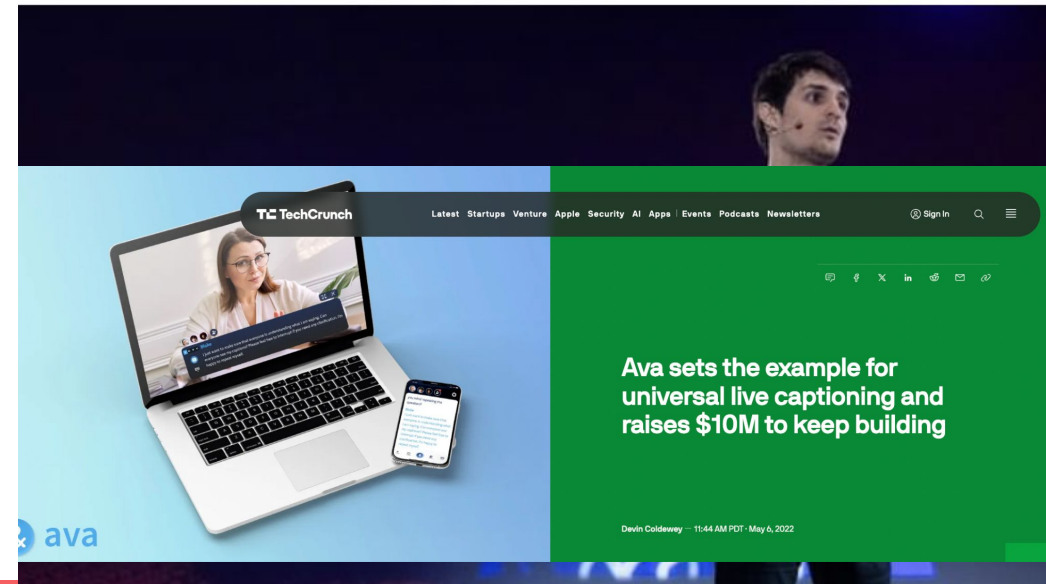
**Attract and Retain** the best talent

**Generate** user loyalty

**Build** social capital

**Prevent** disasters that cost time, money, and reputation.

**Have a genuinely positive impact. Build something you’re proud of.**



The image shows a screenshot of a TechCrunch article. The article title is "Ava sets the example for universal live captioning and raises \$10M to keep building". The author is Devin Coldewey, and the date is May 6, 2022. The article features a video player with a woman speaking and a laptop displaying the video. The TechCrunch logo is visible in the top left corner of the article. The background of the article is a dark blue gradient.

“Over the past year, the world recog



Invest in nature Develop a project Explore projects

RESOURCES / ANNOUNCEMENTS

# Pachama Increases Series B to \$64 Million with \$9 Million Extension

Former Salesforce Chief Business Officer Ebony Beckwith Joins Pachama's Directors

RESTORE NATURE. REMOVE CARBON.

Project 01

## PROJECT EVALUATION CRITERIA 2.3

To ensure every forest project we offer upholds our Quality Standard, we've developed our Project Evaluation Criteria. The criteria includes quality checks that every project must pass. Remote sensing is core to many of these checks; however, it can't tell the whole story, so we also surface important insights relevant to carbon credit quality.

QUALITY CHECK QUALITY INSIGHT

### 01 Is the climate benefit net additional?

Emissions reductions would not have occurred without the incentive of carbon credits.

BASILINE EMISSIONS PROJECT EMISSIONS LEAKAGE EMISSIONS CLEANITY BENEFIT

### 02 Is the climate benefit based on sound and conservative claims?

Emissions reductions are robustly quantified, and each credit represents at least one metric ton of carbon.

BASILINE CLAIMS PROJECT CLAIMS LEAKAGE

Reference region and baseline emissions accounting Project boundaries, carbon fractions, project lifetime, accounting, leakage and legal accountability Leakage emissions

### 03 Is the climate benefit durable?

The project delivers a long-lasting climate benefit ensured by continuous monitoring and public reporting.

ONGOING MONITORING FIRE RISK AND OTHER NATURAL RISKS FOREST MANAGEMENT BUY

### 04 Are there impacts beyond carbon?

The project causes no net harm and delivers biodiversity and community benefits.

SOCIAL IMPACTS ECOLOGICAL IMPACTS BIODIVERSITY IMPACTS CERTIFICATIONS

# Why Aclima Converted to a Public Benefit Corporation When Raising a \$40M Series B

Aclima measures and analyzes air pollution and greenhouse gases on a hyperlocal-level which helps regulators, policymakers, and environmental advocates better understand and manage emissions and their impacts. When Davida Herzl incorporated Aclima, there were two choices for how she could deliver on her mission: she could start a nonprofit, serve parts of society that lack access to resources, and be beholden to philanthropists, or she could build a business for



Davida Herzl, Founder, Aclima

Source: Responsible Innovation Primer for Founders, Startups & Society Initiative 2021

STARTUPS & SOCIETY Futureproof Tech Founders' Summit: Why I Converted To Public Benefit Corp When Raising A \$40M Series B



Lyel Resner (SS) Founding Contributor/Head of Public Interest Technology Studio at Cornell Tech

Davida Herzl (Co-founder & CEO Aclima)

## Dive deep

- Responsible AI
- Algorithmic Bias
- Content Moderation
- Ethical Supply Chains
- Data Privacy + Security
- ...and more

## People to follow

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Safiya Noble – Noble – Algorithms of Oppression  
Ruha Benjamin – Race on Technology  
Kamal Sinclair – Guild of Future Architects  
Mimi Onuoha – People’s Guide to AI  
Ellen Pao – Project Include  
Joy Buolamwini – Algorithmic Justice League  
Eli Pariser – Civic Signals  
Sarah Williams – MIT Civic Data Lab  
Kathy Pham – Mozilla, Harvard  
Wilneida Negron – Coworker  
Rumman Chowdhury - Parity AI  
Shoshanna Ziboff – Surveillance Capitalism

## Frameworks

Ethical OS  
Consequence Scanning  
Ethical Data Canvas  
Society Centered Design  
Design Justice Network  
Bcorp

## Other orgs

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Ford Fdn – Public Interest Tech Initiative  
Berkman Klein Center at Harvard  
Zebras Unite – alternative exits  
Long Term Stock Exchange  
BLab  
Dev/Color – Supporting black technologists  
Code2040 – Building diverse talent pipelines in SV  
Responsible Innovation Labs  
Startups & Society Initiative  
All Tech is Human



Thank you!