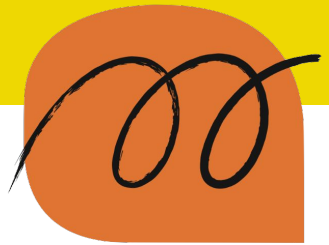
Executing a Public Interest Tech* Research Agenda

Insights from Social Science



UC Berkeley School of Information

Mozilla Festival

Lauren M. Chambers

November 9, 2025 13:30 - 14:30 CET

Goals

- ➔ **Share academic ideas about PIT* *(master's tools??)***
- ➔ **Share my own PIT* research**
- ➔ **Imagine future PIT* research, together!**

What is PIT*?

- Public interest tech
- Civic tech
- Tech ethics
- Tech policy
- Digital rights
- Tech/AI/Data for Good (Aula & Bowles 2023)
- FOSS / Open Source
- Tech for Social Justice (Costanza-Chock+ 2018)
- Responsible tech
- Movement tech (Fjeld 2025)
- …

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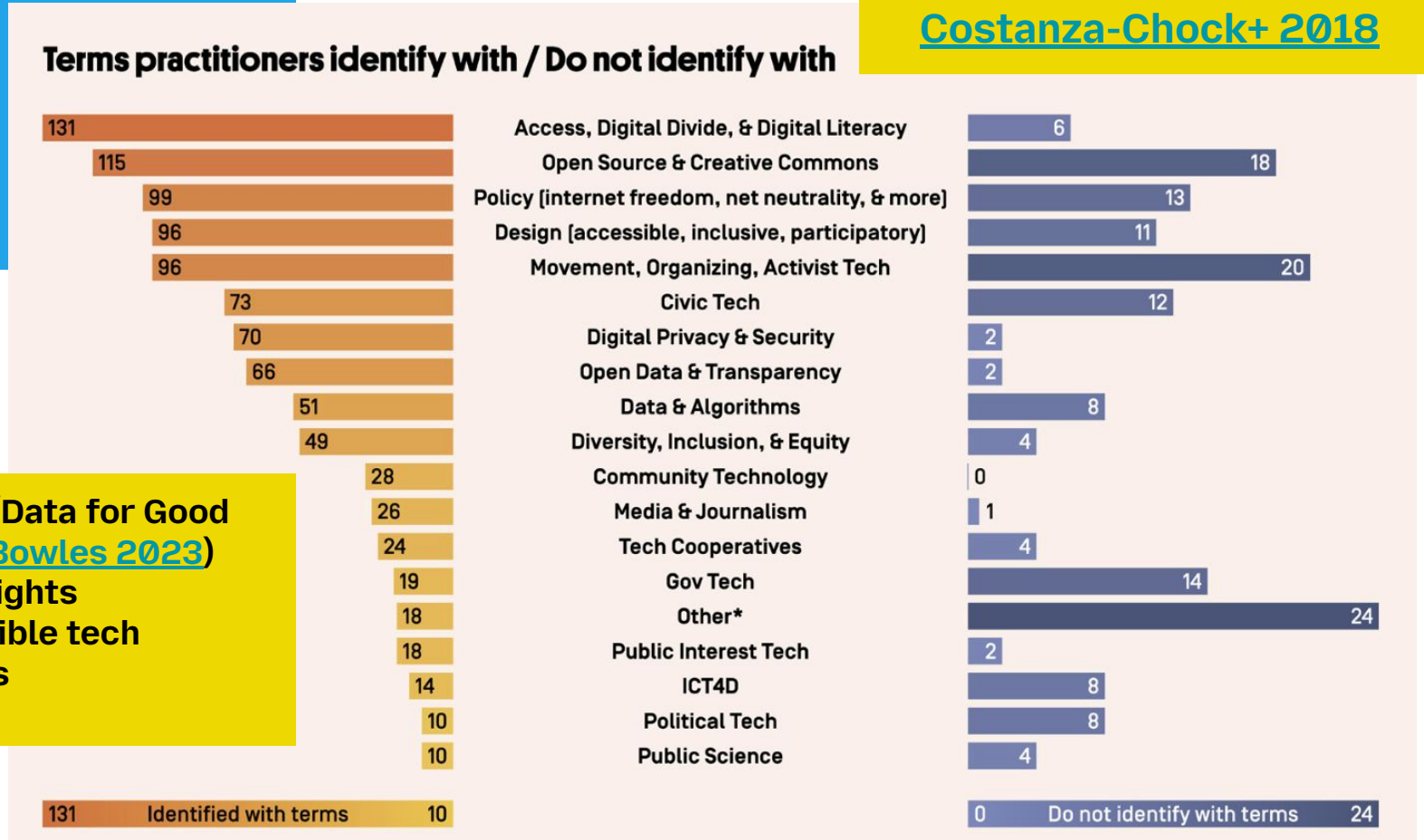
What is PIT*?

+ Tech/AI/Data for Good (Aula & Bowles 2023)
+ digital rights
+ responsible tech
+ AI ethics
+ ...



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Why research PIT*?

It is...

- a material societal response to the techlash
- a future tech workforce
- tech / AI ethics in practice
- academic work that enacts a particular theory of change
- decentering the private sector

Things I know

- Various academic ~literatures~
- Qualitative research methods
- Experience in academia
- Experience in national US-based advocacy nonprofit org
- Collaborating with grassroots groups
- US-based PIT*

Things I don't know

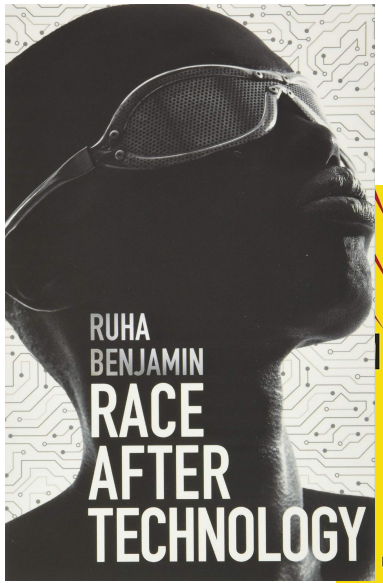
(but would love to know more about!!)

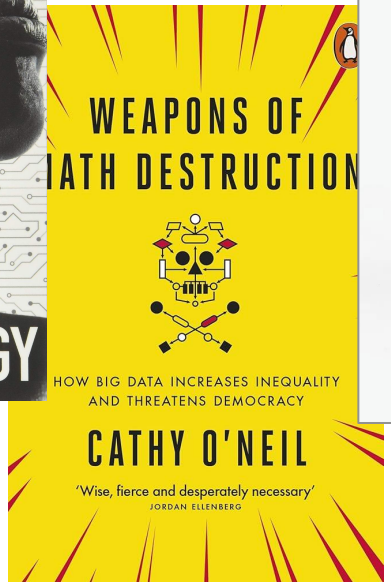
- PIT* outside USA
- Practicing law
- Government experience
- Corporate experience
- Direct grassroots experience
- … ∞!

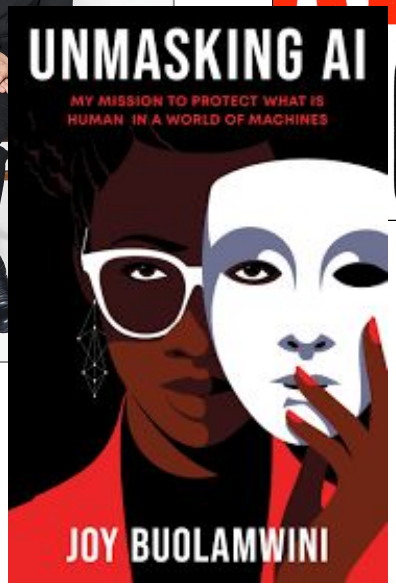
Who are you?

Situating PIT* research

How did we get here?







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How did we get here?

- *Weapons of Math Destruction* by Cathy O'Neil
- *Race Against Technology* by Ruha Benjamin
- *The AI Con* by Emily Bender & Alex Hanna
- The Gender Shades Project by Joy Buolamwini & Timnit Gebru
- "On the Dangers of Stochastic Parrots" by Bender+
- "Oligarchy, State, and Cryptopia" by Julie Cohen
- ...

History of PIT

(not PIT!)*

mozilla FOUNDATION

FORD FOUNDATION

NEW AMERICA

PIT–UN | PUBLIC INTEREST TECHNOLOGY UNIVERSITY NETWORK

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PIT* organizations

all tech is human

BERKMAN KLEIN CENTER FOR INTERNET & SOCIETY AT HARVARD UNIVERSITY

#BlackTechFutures RESEARCH INSTITUTE

DAIR

TECH INSTITUTE AFL-CIO

coding it forward >

AJL

DATA& SOCIETY

accessnow

Upturn

DATA FOR BLACK LIVES

TECHNOLOGISTS *for the* PUBLIC GOOD

moz://a

CENTER FOR DEMOCRACY & TECHNOLOGY

ELECTRONIC FRONTIER FOUNDATION

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PIT* organizations

- Mozilla!
- All Tech is Human
- Technologists for the Public Good
- #BlackTechFutures Research Institute (Fallon Wilson)
- Code for [X] (Schrock 2024)
- Coding it Forward
- AFL-CIO Tech Institute
- Algorithmic Justice League
- DAIR Institute
- Data for Black Lives
- Electronic Frontier Foundation (EFF)
- Fight for the Future
- Center for Democracy & Technology (CDT)
- ...

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Relevant bodies of academic knowledge

- Critical data/algorithm studies
- Information science / studies
- Science & technology studies (STS)
- Organizational sociology
- Occupational / professional sociology
- Social movement studies
- Sociolegal studies
- Future of (computer-supported) work
- Nonprofit tech studies (Le Dantec, DiSalvo, Darian, Rider, Bopp, Voida…)
- Tech policy
- Tech & labor organizing
- Human-Computer Interaction / Human-Computer Design (HCI/HCD)
- …

Relevant social science methods

- Semi-structured interviews
- Document / content analysis
- Case studies
- Participant observation
- Participatory design
- Participatory action research
- Design Justice (Costanza-Chock 2020s)
- Art! Storytelling! Satire!
- ...

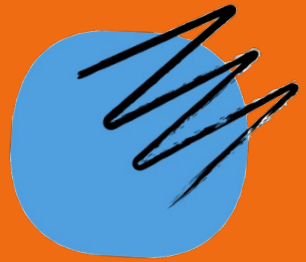
Beware of institutions!!!

- Civil Society (*The Revolution will Not Be Funded: Beyond the Nonprofit Industrial Complex* by INCITE!)
- Universities (Irani & Silberman 2016)
- Government & legal systems (Galanter 1974; Albiston 2011; Leachman 2014)
- Surveillance bureaucracy (Stop LAPD Spying 2020)
- Data (Crooks & Currie 2021; Pei & Crooks 2023)
- ...

"data can be a useful strategy for making a point or for getting an institution to move, but data is not the point of anything: the point is to get free"
-Pei and Crooks 2023, p. 190

"The Revolution will not be NGO-led"
-MozFest, Friday!

"Civil society is like plastic. It's invented, it's moldable, and it will never go away - for better or for worse... But ultimately I want soil; I want a garden to grow. I don't want plastic."
-MozFest, yesterday!

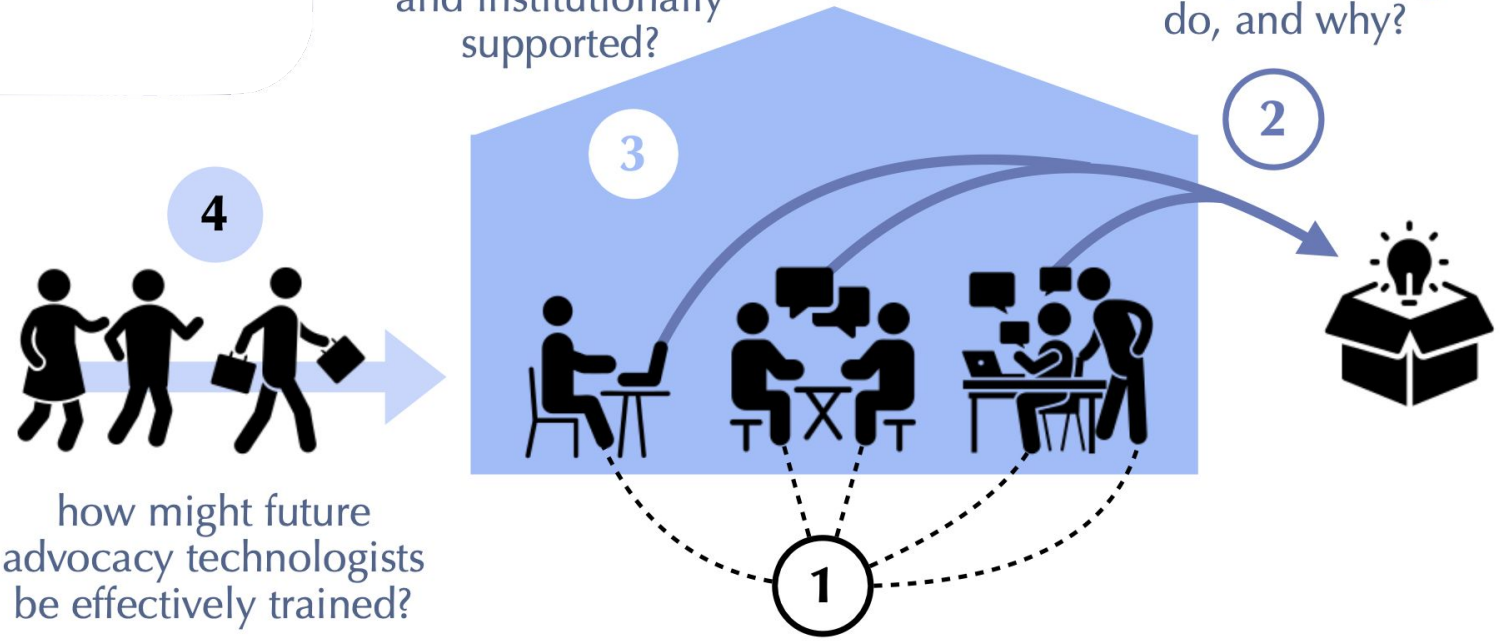


Case Study

Beyond Big Tech: Advocacy Technologists in Mission-Driven Civil Society Organizations

how is advocacy technology work funded and institutionally supported?

what work do advocacy technologists do, and why?



how might future advocacy technologists be effectively trained?

who are advocacy technologists?

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Beyond Big Tech: Advocacy Technologists within Mission-Driven Civil Society Organizations

LAUREN MARIETTA CHAMBERS, University of California, Berkeley, USA

A new class of technology professionals is shaping policy, informing legal arguments, and bolstering advocacy efforts from inside nonprofit and civil society organizations. This career path might be claimed by a number of different new sociotechnical domains: public interest technology (PIT), civic technology, data for good, technology for social justice, and others. Yet it is still unclear exactly what professional roles are emerging, what sorts of people are filling them, and what such individuals' work looks like and achieves. This work presents an interview study that seeks to characterize a specific sub-population of technological practitioners who are contributing materially to mission-driven projects from within the civil society or nonprofit sector: *advocacy technologists*. I present four patterns of praxis (i.e., professional practices and paradigms) common to advocacy technologists: their disposition as critics who *interrogate* technological paradigms and who *introspect* on their own ethical footprint, and their professional position *translating* between technical and non-technical worlds and *trailblazing* into new career paths. These four patterns demonstrate that advocacy technologists are choosing to occupy a precarious new niche within advocacy work ecosystems that has great potential to impact policy and design outcomes. Indeed, these practitioners enlist computational strategies to advance advocacy goals, situate deep sociotechnical expertise within policymaking contexts, and further civil society as an active site of tech design in its own right. This study contributes to the growing body of literature in human-computer interaction (HCI) and computer-supported cooperative work (CSCW) that explores computing technologies' role in processes and places of sociopolitical change. Ultimately, this work proposes that mission-driven civil society organizations and their technologists are not only underexplored sites for HCI and CSCW research, but also potentially rich collaborators for sociotechnical researchers who seek to deepen their impact on policy and social change.

CCS Concepts: • **Social and professional topics → Computing occupations**; **Project and people management**; *Computing and business*; **Computing / technology policy**; • **Human-centered computing → Empirical studies in HCI**; • **Applied computing → Computers in other domains**.

Additional Key Words and Phrases: public interest technology, civil society, advocacy, public policy

ACM Reference Format:

Lauren Marietta Chambers. 2025. Beyond Big Tech: Advocacy Technologists within Mission-Driven Civil Society Organizations. *Proc. ACM Hum.-Comput. Interact.* 9, 7, Article CSCW378 (November 2025), 31 pages. https://doi.org/10.1145/3757559

1 Introduction

In March 2020, a coalition including public defenders and civil rights advocates [illegible] monwealth of Massachusetts in *Committee for Public Counsel Services v. Trial Court (CPCS v. Trial Court)*, a lawsuit seeking [illegible] the COVID-19 pandemic. [illegible]

beyond big tech:

advocacy technologists in mission-driven civil society organizations

lauren m. chambers | lauren@ischool.berkeley.edu

summary

A new kind of tech worker is contributing materially to mission-driven projects from within nonprofit advocacy groups. These interdisciplinary professionals reflect shifting values and new orientations of power around tech and policy.

questions

- **who** are the tech experts working inside mission-driven nonprofits?
- **how** do they operate in their roles?
- what might they tell us about the shifting **relationship between tech and advocacy**?

background

Over the past two decades, civil society, government, and academic work **across domains** has seen new tech initiatives - including non-computational domains such as policy. Mean-while, the **techlash** soured Big Tech's public image and interest in **public interest tech** has grown.

methods

- 23 semi-structured video **interviews**, Mar - Oct 2024
- recruited individuals who (1) worked for an **advocacy organization** and (2) had **tech skills or expertise** used in service of advocacy
- prioritized domains which have **historically not been data- or tech-oriented**
- reflexive thematic analysis

results

career pathways

homegrown critical technologists
- came of age alongside the internet (80s/90s)
- entire careers devoted to sociopolitical uses of tech

sociotechnical converts
- began careers in civil society, law, or organizing
- came into tech through sociopolitical work
- (or vice versa)

sociotechnical natives
- in their 20s & early 30s
- left college with technical training
- immediately sought sociopolitical work

patterns of practice

translating
"back and forth" between advocacy **goals** and technical **implementation**
shining light into **black boxes**; seeing past Big Tech's smoke & mirrors

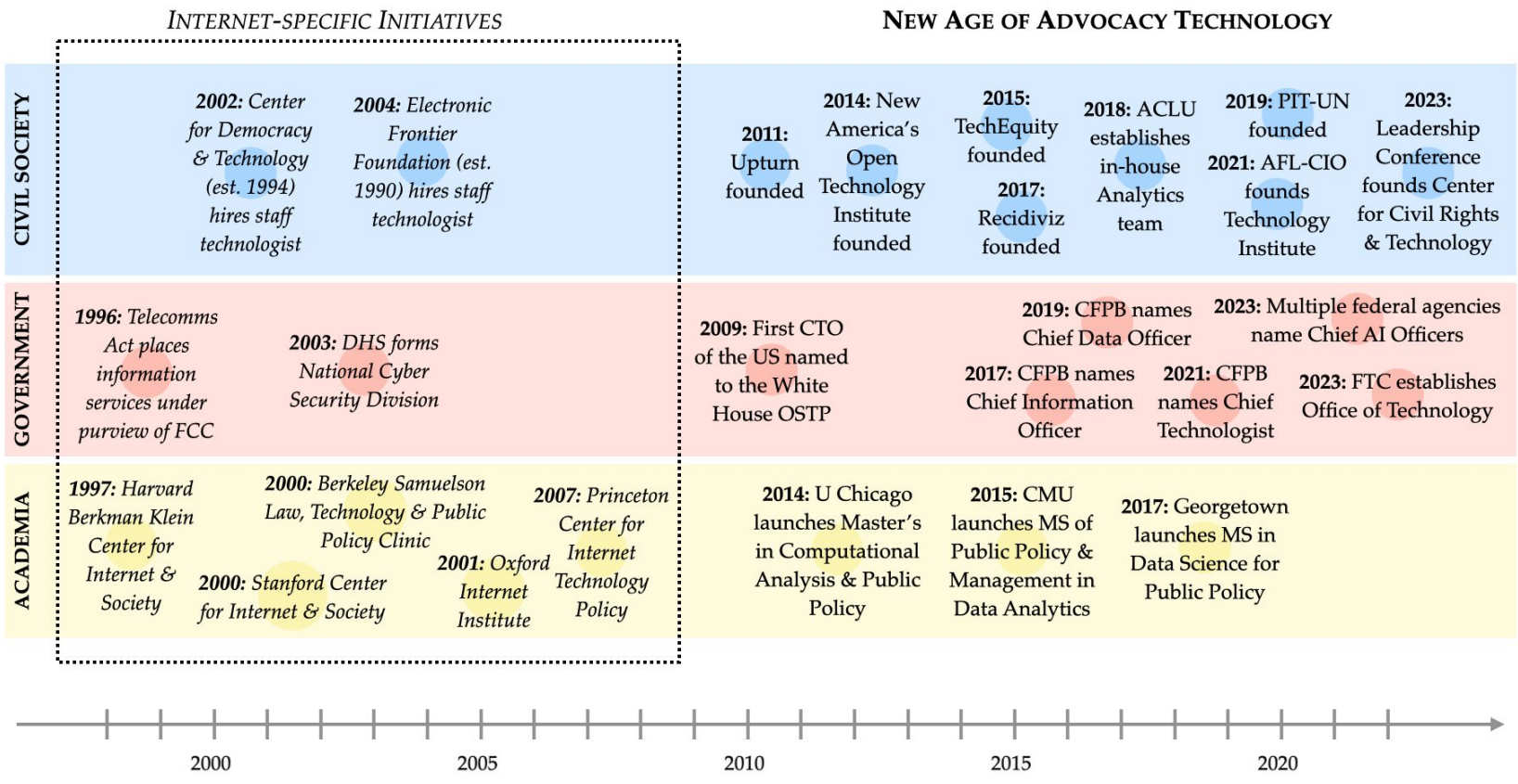
interrogating
resisting **hype** and magical thinking (esp. in the genAI age)
rejecting technosolutionism; **centering people** and problems

introspecting
dedication to meaningful and **value-aligned** careers, despite lower pay
critically evaluating their own **impact**, workplaces, and their roles in society

trailblazing
uncertain paths behind and ahead; lack of professional pipeline
"a team of one;" **isolation** and limited collaboration or mentorship

4 computational strategies **bolster advocacy**; critical

5 importa studyin suppos tech v



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Methods

- 23 semi-structured interviews (Weiss 1995) from Mar - Oct 2024
- recruited individuals who:
  - worked for an advocacy group, in almost all cases a mission-driven civil society organization,
  - had technological skills or expertise used in service of that advocacy
- prioritized domains which have historically not been data- or tech-oriented
- honoraria ($100/hr) provided by Berkeley IRLE
- 60-90 minutes, recorded & transcribed via Zoom
- flexible coding (Deterding & Waters 2021) + reflexive thematic analysis (Braun & Clarke 2006) using MaxQDA

Chambers, Lauren M. 2025. “Beyond Big Tech: Advocacy Technologists within Mission-Driven Civil Society Organizations.” *Proc. ACM Hum.-Comput. Interact.* 9 (CSCW7): 378:1-378:31.

Results: Career Pathways

- 6/23 participants
- began their careers in civil society, law, or organizing
- came into tech through sociopolitical work
- (or vice versa)

sociotechnical converts

homegrown critical technologists

- 8/23 participants
- came of age alongside the internet (80s/90s)
- entire careers devoted to sociopolitical uses of tech

sociotechnical natives

- 9/23 participants
- in their 20s & early 30s
- left college with technical skillsets (often CS majors)
- immediately sought work on sociopolitical issues

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Results: Example work products

- dashboards for food banks
- algorithmic tenant screening policies
- internet standards on E2EE
- state & local anti-surveillance legislation
- in-app ad targeting for refugee services
- streamlined software for government benefits applications
- digital safety & security training for activists / communities
- … (more detailed paper forthcoming!)

Results: Patterns of Praxis

translating

"back and forth" (P18) between advocacy goals and technical implementation

shining light into black boxes; seeing past Big Tech's smoke & mirrors

interrogating

resisting "*hype*" (P15) & *"magical"* thinking (P21, P22, P23), esp. in the genAI age

rejecting technosolutionism; centering *"the human beings"* (P4) and problems

introspecting

dedication to meaningful careers aligned to *"high level vision"* (P19), despite lower pay

critically evaluating their impact, workplaces, and roles in society: *"What are we doing?"* (P17)

trailblazing

paths are not *"pre-charted"* (P1); lack of professional pipeline *"if you like math and don't want to do evil"* (P19)

"a team of one" (P20); *"isolation"* (P9) and limited collaboration or mentorship

Chambers, Lauren M. 2025. "Beyond Big Tech: Advocacy Technologists within Mission-Driven Civil Society Organizations." *Proc. ACM Hum.-Comput. Interact.* 9 (CSCW7): 378:1-378:31.

Discussion

Advocacy technologists are **choosing** to occupy a **precarious** new **niche** within advocacy ecosystems that has great potential to **impact policy & design** outcomes.

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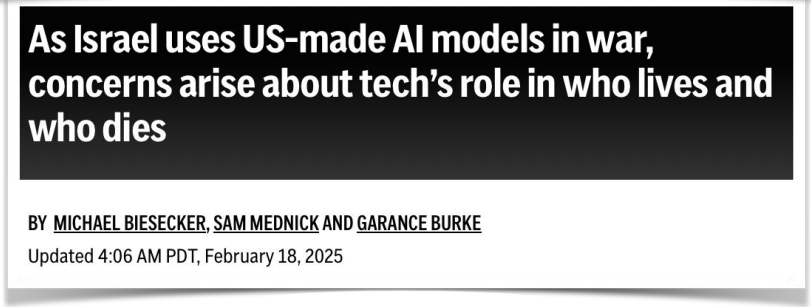
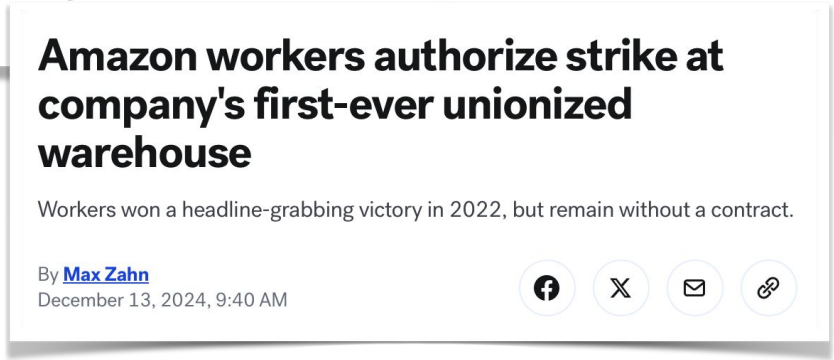
Discussion: Choice





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Discussion: Precarity

- **limited training**
  interdisciplinary programs; real-world skill-building
- **finding & staying in jobs**
  obscure job search; uncompetitive pay; limited mentorship
- **need for external professional development**
  initiatives like Technologists for Public Good; #BlackTechFutures...

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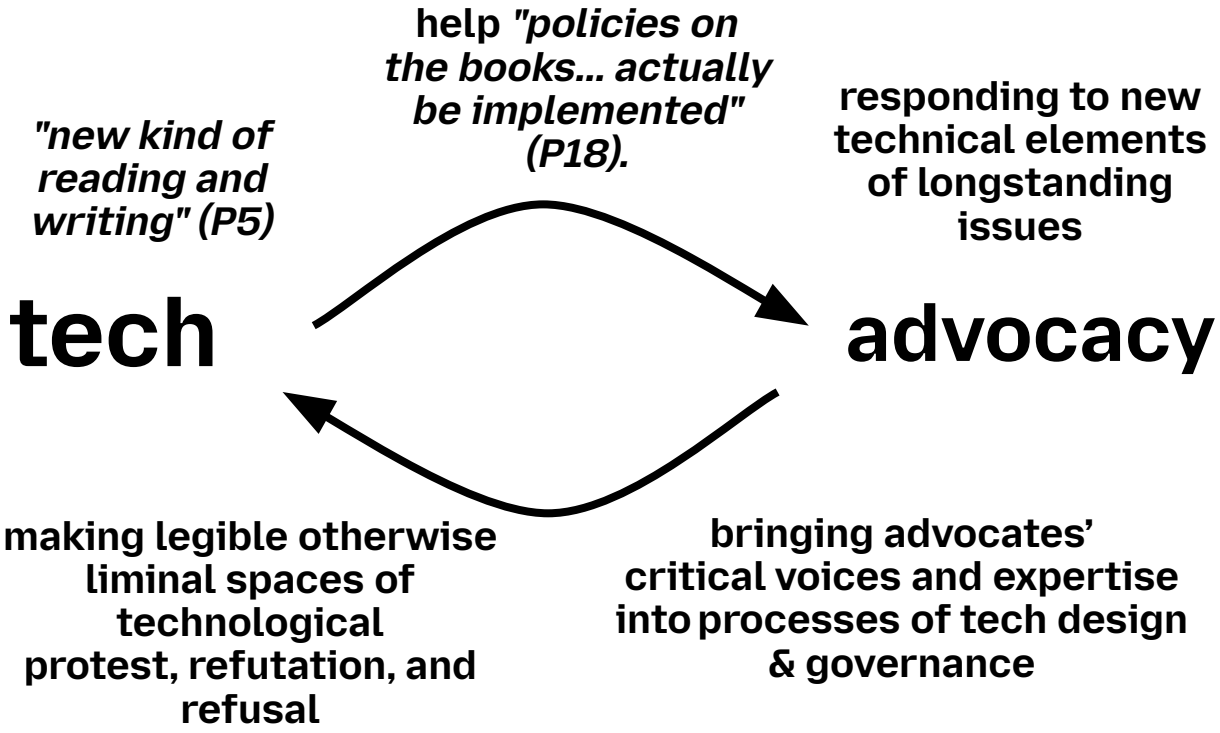
Discussion: Policy & Design Impacts



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Discussion: A New Niche

"in-house technical capacity" to rectify "the uneven technological expertise among stakeholders"
Mulligan & Bamberger 2018

"recognition of the potentially creative and generative interplay of design, practice, and policy"
Jackson+ 2014

experts to "help individuals and organizations work around imperfect and incomplete data"
Bopp+ 2017

"one foot planted in the craft work of design and the other foot planted in the reflexive work of critique"
Agre 1997

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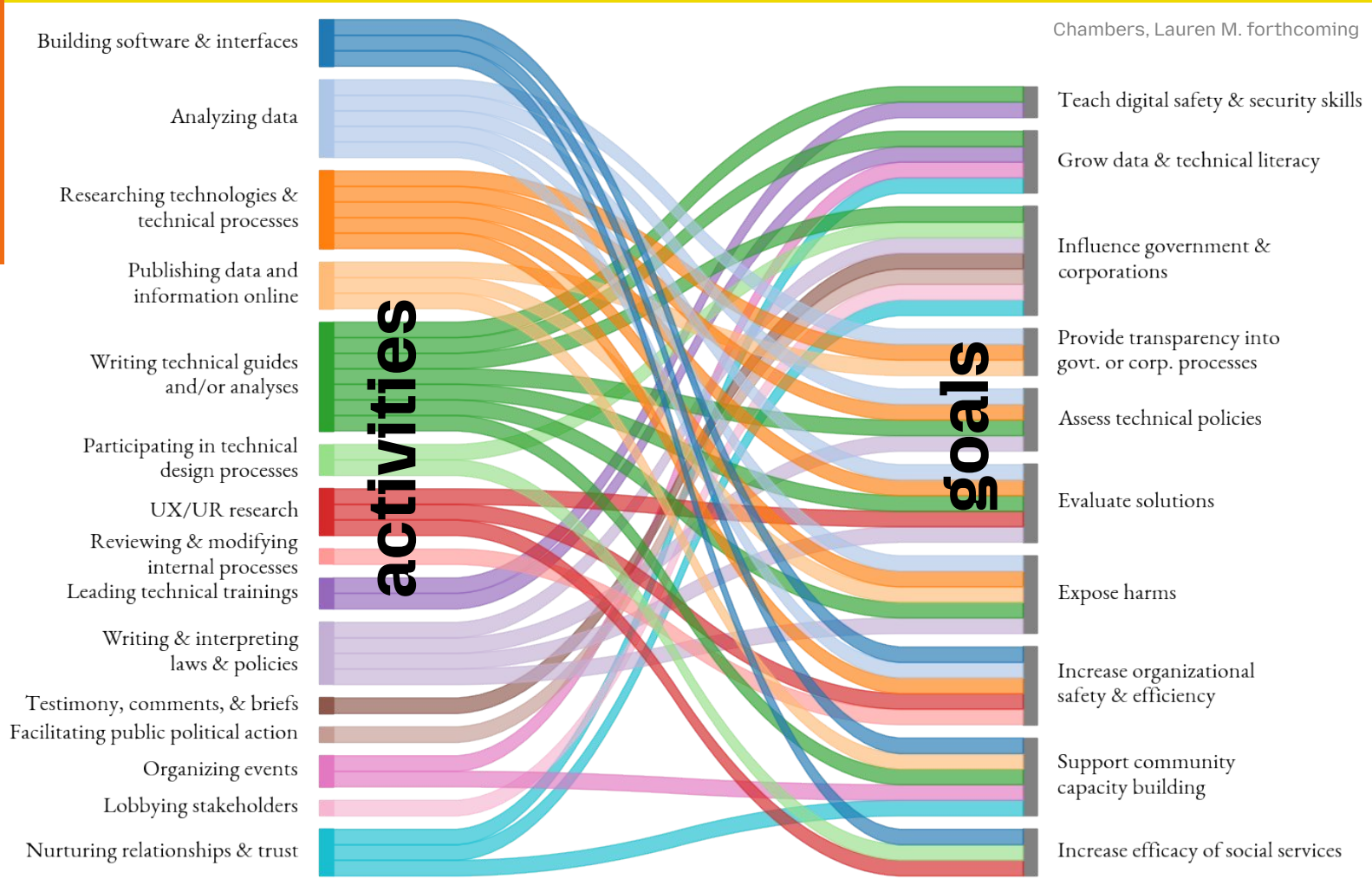
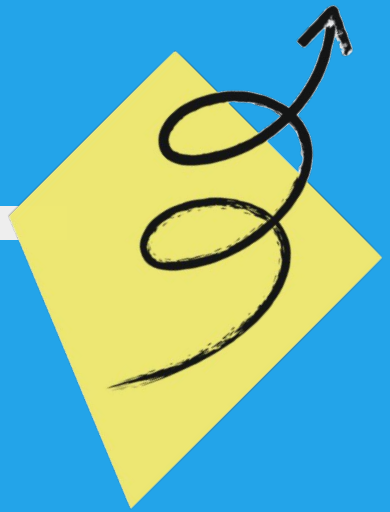
Forth-coming work



Discussion



what questions about public interest tech* do you / your communities want to answer?

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what experts and artifacts might provide insight into this question(s)?