DATA JUSTICE READINESS: AN ABOLITIONIST FRAMEWORK FOR TECH CLINIC INTAKE

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Within two decades, the tech industry has turned most of modern life into a real-time data stream, reducing human beings into trackable datasets. Gaps in government services—including benefits administration, education, transportation, and public health—have created new market opportunities for tech companies to profit off product solutions that classify, track, and discipline marginalized communities. Tech law and policy advocates have done little to thwart this development so far, supporting expert-driven reforms that may contain harmful downstream effects without touching the structural issues driving tech adoption in the first place.

Tech law clinics have a critical role to play in supporting those most harmed by these trends. This Article proposes a new framework for tech law clinics to assess whether potential clients and projects align with a data justice vision. Data justice concerns the intersection of data-driven technologies and social, racial, and economic justice issues. A data justice framework for client and project selection exposes students to the real impacts of these technologies on structurally-marginalized communities and enables them to elevate those communities' visions of change. Drawing on insights from prison industrial complex (PIC) abolitionists and movement lawyering, the framework prioritizes projects where students collaborate directly with these communities. This approach will help tech clinics inspire a new generation of legal advocates with the lawyering skills needed to build real, people (data) power.

Introduction

"This moment of global inequality demands incompetent subjects. The status quo and ever-intensifying versions of it require

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incompetent consumers who will learn to want technological solutions to their political problems."

Tressie McMillan Cottom, *Dying to Be Competent*, in Thick and Other Essays 96 (2019).

Current and future law students will be practicing law in an era of reckoning for the so-called artificial intelligence (AI) industry. Massive investments into AI development have yet to generate returns, but that has not slowed various industries in their race for the earth-shatteringly transformative outcomes which technology companies have promised to deliver. In this latest technophilic fervor, enthusiasts have compared AI to the early internet, the advent of electricity, and even the California gold rush, when a mad drive for extractive profits devastated the natural environment and further destroyed indigenous communities.

In this brave, new, AI-powered world, corporate success depends largely on one thing—data.⁷ Despite the recent surge of popular interest, neither AI nor data are new constructs.⁸ In the early 2010s, several people and groups began to grapple with the "Big Data" movement

¹ See Elizabeth Lopatto, Artificial Investment, The Verge (Feb. 22, 2024, 8:00 AM), https://www.theverge.com/24075086/ai-investment-hype-earnings ("The stage is set for 2024 to be a year of reckoning for AI, as business leaders home in on what AI can actually do right now."); see also Emily Tucker, Ctr. on Privacy & Tech., Medium (Mar. 8, 2022), https://medium.com/center-on-privacy-technology/artifice-and-intelligence%C2%B9-f00da128d3cd (explaining why the Privacy Center will no longer use the terms "artificial intelligence,""AI," and "machine learning").

² Lopatto, *supra* note 1 (quoting Bret Greenstein, Data and Analytics Partner at consulting firm PwC).

³ See Why Generative AI is 'Like the Internet Circa 1996,' C3.AI, https://c3.ai/whygenerative-ai-is-like-the-internet-circa-1996/ (last visited Aug. 17, 2024).

⁴ See Will Daniel, Wall Street Is Obsessed with AI. From the 'New Electricity' to the Next Gold Rush, Here's How Top Analysts See the Tech Revolution Playing Out, FORTUNE (Oct. 28, 2023, 4:00 AM), https://fortune.com/2023/10/28/artificial-intelligence-bubble-or-real-wall-street-research-reports/.

⁵ *Id*.

⁶ See A Golden State: Mining and Economic Development in Gold Rush California 105–121 (James J. Rawls & Richard J. Orsi, Eds., 1999) (discussing environmental impacts of the gold rush era); Gold, Greed & Genocide, Int'l Indian Treaty Council, https://www.iitc.org/gold-greed-genocide/ (last visited Aug. 17, 2024); The Gold Rush Impact on Native Tribes, Pbs: Am. Experience, https://www.pbs.org/wgbh/americanexperience/features/goldrush-value-land/ (last visited Aug. 17, 2024).

⁷ Mark Samuels, *Despite All the AI Hype, Success Depends on Just One Thing*, ZDNET (Jan. 22, 2024, 9:17 AM), https://www.zdnet.com/article/despite-all-the-ai-hype-success-depends-on-just-one-thing/ (describing the centrality of data collection and analysis in AI development); *see also* Joe McKendrick, *Data Is the Missing Piece of the AI Puzzle. Here's How to Fill the Gap.*, ZDNET (Jan. 15, 2024, 5:12 PM), https://www.zdnet.com/article/data-is-the-missing-piece-of-the-ai-puzzle-heres-how-to-start-filling-the-gap/ (discussing organizational data complexity as an obstacle to AI deployment).

⁸ See generally Matteo Pasquinelli, The Eye of the Master: A Social History of Artificial Intelligence (2023); Kate Crawford, Atlas of AI: Power, Politics, and the Planetary Costs of Artificial Intelligence 89–121 (2021).

dominating the development of technology products and systems.⁹ Around the turn of the 21st century, advancements in data storage and processing, modern computing, and the internet, enabled developers to collect and process massive amounts of data based on peoples' behaviors, both online and off.¹⁰ Soon, tech companies and developers had amassed mind-bogglingly large datasets that they used to build AI systems less than a decade later.¹¹

Today, data-hungry machine learning processes crunch through massive amounts and types of data to produce untraceable inferences. ¹² Understanding this path dependency between colossal datasets and seemingly "magical" AI capabilities helps pull back the curtain on the claims of companies selling AI products, like generative models, by grounding these technologies in their foundational reliance on data accumulation—most of which occurred without the knowledge or consent of people whose data was taken. ¹³ To stay competitive in this data race,

⁹ See, e.g., Cathy O'Neil, Weapons of Math Destruction: How Big Data Increases Inequality and Threatens Democracy (2016); Community Cleverness Required, 455 Nature 1 (2008), https://www.nature.com/articles/455001a (special collection on Big Data); Kate Crawford & Jason Schultz, Big Data and Due Process: Toward a Framework to Redress Predictive Privacy Harms, 55 Boston Coll. L. Rev. 93 (2014); Nick Couldry & Ulises Mejias, Data Colonialism: Rethinking Big Data's Relation to the Contemporary Subject (2018), https://eprints.lse.ac.uk/89511/1/Couldry_Data-colonialism_Accepted.pdf; Sarah Brayne, Big Data Surveillance: The Case of Policing, 82 Am. Socio. Rev. 977 (2018), https://www.asanet.org/wp-content/uploads/attach/journals/oct17asrfeature.pdf; Sanjeev & Sandeep Sardana, Big Data: It's Not a Buzzword, It's a Movement, Forbes (June 27, 2014, 12:32 PM), https://www.forbes.com/sites/sanjeevsardana/2013/11/20/bigdata/; Gil Press, A Very Short History of Big Data, Forbes (July 17, 2019, 11:32 AM), https://www.forbes.com/sites/gilpress/2013/05/09/a-very-short-history-of-big-data/.

¹⁰ See Press, supra note 9 (providing a brief history); Omer Tene & Jules Polonetsky, Big Data for All: Privacy and User Control in the Age of Analytics, 11 N.W. J. Tech. & Intell. Prop. 239, 240 (2013) (defining Big Data to include personal data generated from a variety of sources).

¹¹ See Kate Crawford & Trevor Paglan, Excavating AI: The Politics of Images in Machine Learning Training Sets, https://excavating.ai/ (last visited Aug. 17, 2024).

¹² See M.C. Elish & Danah Boyd, Situating Methods in the Magic of Big Data and AI, Commc'n Monograph 1 (2018), https://par.nsf.gov/servlets/purl/10074339 (unpacking the histories and cultural claims in the interconnection between big data and AI); Andrew McAfee & Erik Brynjolfsson, Big Data: The Management Revolution, Harv. Bus. Rev. (Oct. 2012) https://hbr.org/2012/10/big-data-the-management-revolution (describing the shift to big data analytics and providing use cases).

¹³ Pun intended. See Elish & Boyd, supra note 12, at 6–7 (discussing the common marketing technique of equating AI processes to "magic"); Crawford, supra note 8, at 121 ("Fundamentally, the practices of data accumulation over many years have contributed to a powerful extractive logic, a logic that is now a core feature of how the AI field works."). See also Crawford & Paglan, supra note 11; Olivia Solon, Facial Recognition's 'Dirty Little Secret': Millions of Online Photos Scraped without Consent, NBC News (Mar. 12, 2019), https://www.nbcnews.com/tech/internet/facial-recognition-s-dirty-little-secret-millions-online-photos-scraped-n981921; Jon Porter, Facebook and LinkedIn Are Latest to Demand Clearview Stop Scraping Images for Facial Recognition Tech, The Verge (Feb. 6, 2020, 12:22 PM), https://www.theverge.com/2020/2/6/21126063/facebook-clearview-ai-image-scraping-facial-recognition-database-terms-of-service-twitter-youtube.

corporate leaders must continue prioritizing a data-centric approach despite its ethical consequences.¹⁴

Luckily for AI companies and their investors, there is no shortage of data. Over the past 30 years—about the lifespan of an average U.S. law student—massive state surveillance programs, accessible internet, and new data-driven technologies have turned nearly every aspect of modern life into a potential data stream.¹⁵ This trend, called data-fication, has enriched tech companies, increasing their political and economic power.¹⁶ And while tech companies were disrupting and innovating with minimal regulatory interference, governments across the globe were embracing austerity measures that cut back on providing social services.¹⁷

The resulting failures of the state to provide quality shelter, health-care, education, transportation, and financial security at scale have opened new market opportunities for tech companies to profit from, resulting in the adoption of data-driven tools by governments to manage and discipline struggling communities.¹⁸ This increased reliance on corporate tech solutions for complex, social issues drives the development and deployment of technologies of social control.¹⁹ This so-called carceral tech—including facial recognition tech, location tracking devices, predictive policing programs, automated benefits administration

¹⁴ See Wavestone, 2024 Data and AI Leadership Exec. Survey 16 (2024), https://www.wavestone.com/app/uploads/2023/12/DataAI-ExecutiveLeadershipSurveyFinalAsset.pdf; Thomas H. Davenport & Randy Bean, Survey: GenAI Is Making Companies More Data Oriented, Harv. Bus. Rev. (Jan. 15, 2024), https://hbr.org/2024/01/survey-genai-is-making-companies-more-data-oriented; Sanna J. Ali, Angèle Christin, Andrew Smart, & Riita Katila, Walking the Walk of AI Ethics in Technology Companies, Stanford Univ. Human-Centered A.I. (Dec. 2023), https://hai.stanford.edu/sites/default/files/2023-12/Policy-Brief-AI-Ethics_0.pdf (uncovering several obstacles to implementing meaningful ethics interventions within tech companies).

¹⁵ See Gabriel Kuris, Advice for Older Law School Applicants to Consider, U.S. News & World Rep. (Dec. 5, 2022, 9:34 AM), https://www.usnews.com/education/blogs/law-admissions-lowdown/articles/advice-for-older-law-school-applicants-to-consider (stating most law school applicants are under 25, with roughly 20% of applicants being 30 or older); Madeleine Carlisle, How 9/11 Radically Expanded the Power of the U.S. Government, Time (Sept. 11, 2021, 7:00 AM), https://time.com/6096903/september-11-legal-history/ (describing expansion of domestic surveillance programs, including congressional enactment of the Patriot Act of 2001); Catherine Crump & Matthew Harwood, Invasion of the Data Snatchers: Big Data and the Internet of Things Means The Surveillance of Everything, ACLU (Mar. 25, 2014), https://www.aclu.org/news/national-security/invasion-data-snatchers-big-data-and-internet-things-means-surveillance-everything (discussing various modes of internet-connected data surveillance, including data-driven "smart" devices).

¹⁶ See infra Section I.A.

¹⁷ See Ali Bhagat & Rachel Phillips, The Techfare State: Debt, Discipline, and Accelerated Neoliberalism, 28 New Pol. Econ. 526 (2023); VIRGINIA EUBANKS, AUTOMATING INEQUALITY: How High-Tech Tools Profile. Police, and Punish the Poor (2018).

¹⁸ See Bhagat & Phillips, supra note 17.

¹⁹ See Michelle Gilman, Poverty Lawgorithms, DATA & Soc'y (2020), https://datasociety.net/wp-content/uploads/2020/09/Poverty-Lawgorithms-20200915.pdf.

tools, and more—punish social marginality by reproducing classifications that drive dispossession among structurally-marginalized communities, enabling carceral tech users to separate, contain, and exile the overpoliced, under-resourced, and undocumented.²⁰ They simultaneously grow the data power of companies selling or licensing these solutions while producing significant data-based injustices, deepening preexisting social, economic, and racial inequities.²¹

Directly-impacted communities experiencing the brunt of the harms rarely have a direct say in whether or how carceral tech will affect their lives. Their voices are largely missing from formal tech law and policy discussions where expert-driven, down-field policy responses tweak existing technologies without disturbing the underlying structural issues that make them viable options. As a result, government customers continue pulling public money away from community-based investment and enrich the private tech industry instead. This is also the case with many commercial tech products where ordinary people are the primary customers. For example, rideshare apps generate value directly from real-time data collection. So far, efforts to reign them in often fail to expand public transit options that low-income, working class, disabled, and other communities rely on. Instead, reforms focus on tweaking algorithms and quelling driver labor unrest so that business can continue as usual. These are far from the disruptive tech interventions

²⁰ See infra Section I.A. Similar to "historically marginalized", I use "structurally marginalized" to shift focus to structures and institutions that unevenly distribute opportunities along racial, economic, gender, sexuality, religious, and other lines. See John A. Powell, Deepening Our Understanding of Structural Marginalization, 22 POVERTY & RACE 3 (2013), https://belonging.berkeley.edu/sites/default/files/Sept-Oct%202013%20PRRAC%20 Disparities%20Article.pdf.

²¹ See Gilman, supra note 19; EUBANKS, supra note 17.

 $^{^{22}\,}$ See generally Ruha Benjamin, Race After Technology: Abolitionist Tools for the New Jim Code (2019).

²³ See infra Section I.B.

²⁴ See Cory Doctorow, No, Uber's (Still) Not Profitable, Medium (Aug. 9, 2023), https:// doctorow.medium.com/no-ubers-still-not-profitable-2b8054e375ea; How Uber Uses Data Science To Reinvent Transportation, ProjectPro.io (Apr. 11, 2024), https://www.projectpro. io/article/how-uber-uses-data-science-to-reinvent-transportation/290#mcetoc_1faunm6rca; Heather Somerville, The Answer to Uber's Profit Challenge? It May Lie In Its Trove of Data, REUTERS (May 9, 2019, 1:30 AM), https://www.reuters.com/article/us-uber-ipo-profit/theanswer-to-ubers-profit-challenge-it-may-lie-in-its-trove-of-data-idUSKCN1SF0O5/; Steven Hill, Ridesharing Versus Public Transit, Am. Prospect Mag. (Mar. 27, 2018), https:// prospect.org/infrastructure/ridesharing-versus-public-transit/; E. Tammy Kim, How Über Hopes To Profit From Public Transit, N.Y. Times (May 30, 2019), https://www.nytimes. com/2019/05/30/opinion/uber-stock.html; Diana Furchtgott-Roth, Out With Buses, In With Rideshare, Forbes (Apr. 4, 2022, 3:58 AM), https://www.forbes.com/sites/dianafurchtgott-roth/2022/03/31/out-with-buses-in-with-rideshare/; Sebastian Klovig Skelton, Uber CEO Denies Pricing Algorithm Uses 'Behavioural Patterns,' ComputerWeekly.com (Feb. 20, 2024, 2:49 PM), https://www.computerweekly.com/news/366570421/Uber-CEO-admits-pricingalgorithm-uses-behavioural-patterns; Mike Scarcella, Uber Loses Challenge to California

that reformers need to resist data injustice, and they rarely come from those experiencing the additional traffic congestion, increased bus fares, and other negative consequences of rideshare products on mass transit accessibility.

Law schools across the country have tried to keep pace with this digital transformation, offering clinics in which students work on real-life cases raising emergent technology law and policy issues.²⁵ In the clinical tradition, many aim to serve the public interest through curated fieldwork opportunities that prepare their students to be justice ready.²⁶ This requires tech clinicians to make pedagogical choices that are most likely to expose students to injustices in the technology ecosystem as experienced within their client communities, operant legal systems, and broader society.²⁷ But what does it mean to be justice ready in a technology ecosystem where corporate innovation and government need converge through the datafication of complex social issues, deepening social, racial, and economic inequities? As a community, tech clinicians do not yet have a shared understanding of how client and project selection can advance a vision of data justice, one where individuals harmed by technologies of classification and control build people power to limit or eliminate their use altogether.

Tech clinics are uniquely positioned to train future lawyers with the skills to advocate against carceral tech by uplifting the needs of directly-impacted communities in selecting clients and projects intentionally. Client and project selection is a foundational part of clinic pedagogy that determines critical parts of student learning objectives and can reinforce a clinic's commitment to justice.²⁸ When clinicians are

Gig Worker Law in US Appeal Court, REUTERS (June 10, 2024, 12:50 PM), https://www.reuters.com/legal/uber-loses-challenge-california-gig-work-law-us-appeals-court-2024-06-10/.

²⁵ See Jake Holland, From Harvard to Berkeley, Clinics Train Next-Gen Tech Lawyers, Bloomberg L. (Aug. 25, 2021, 4:01 AM), https://news.bloomberglaw.com/ privacy-and-data-security/from-harvard-to-berkeley-clinics-train-next-gen-tech-lawyers.

²⁶ Jane H. Aiken, The Clinical Mission of Justice Readiness, 32 B.C. J.L. & Soc. Just. 231,

²⁷ See Amanda Levendowski, Teaching Doctrine for Justice Readiness, 29 CLIN. L. REV. 111 (2022) (discussing teaching legal doctrine to highlight social justice issues in IP and information policy, especially when clinical fieldwork may not raise them directly).

²⁸ See Alina S. Ball, Disruptive Pedagogy: Incorporating Critical Theory in Business Law Clinics, 22 CLIN. L. Rev. 1, 39–48 (2015); id. at 39 ("[Strategic client selection] is an effective pedagogical tool to promote critical learning because it is the interactions with their clients that will ultimately determine the students' learning experience."); Anna E. Carpenter, The Project Model of Clinical Education: Eight Principles to Maximize Student Learning and Social Justice Impact, 20 CLIN. L. REV. 39 (2013); Sarah Paoletti, Finding the Pearls When the World Is Your Oyster: Case and Project Selection in Clinic Design, 5 Drexel L. Rev. 305 (2013); Adrienne Jennings Lockie, Encouraging Reflection on and Involving Students in the Decision to Begin Representation, 16 CLIN. L. REV. 357, 365 (2010) ("A clinic's identity plays an important role in clinic design; how the clinic conceives of itself is closely linked to client selection and the resulting docket of the clinic").

intentional about who students work with and why, they can help students better internalize classroom readings and discussions about unjust systems.²⁹ Cases and projects shape the skills students will practice, their perceptions on the relationship between law and society, and their sense of themselves as legal advocates, among other aspects of student learning.³⁰ Clinicians who adopt a clear vision of justice guiding their selection process and use consistent criteria for assessing client or project alignment can avoid the risk that a particular representation will dictate pedagogical methods, rather than the reverse.³¹

To guide tech clinics with intentional client and project selection, this Article offers a new framework driven by a data justice vision. This vision prioritizes case and project selection involving issues at the intersection of carceral tech and social, racial, and economic justice. As datafication expands technology's reach into ever more precarious systems of labor, healthcare, education, policing, social services, and family regulation, tech clinics can better prepare students to advocate for those whose needs rarely drive tech reform conversations. Data justice encourages clinicians to prioritize projects where students can engage directly with the needs and perspectives of communities harmed by carceral tech, allowing students to gain first-hand awareness of data injustices and the confidence to resist them. Data justice-aligned projects will help shape their perspectives on when, how, and if tech lawyers can support meaningful change that empowers those already suffering from intersectional, systemic inequities. Students will also be better able to recognize the socio-historical contexts behind contested carceral tech, consistent issues of marginalization affecting their clients, power structures, and when uniting law and organizing can help or hurt resistance campaigns.32

This Article brings together critical perspectives on data-driven technologies and scholarship on clinical pedagogy, specifically justice-oriented client and project selection.³³ Focusing on carceral tech that weaponize social precarity, it draws inspiration from organizers and clinicians who have adopted an abolitionist vision to shape reforms to oppressive systems like the PIC and related clinics' project choices, respectively.³⁴ The proposed data justice vision and selection framework incorporates several abolitionist criteria for assessing whether a

²⁹ Ball, supra note 28, at 41.

³⁰ *Id.* at 46–47.

³¹ Carpenter, supra note 28, at 62.

³² See Ball, supra note 28, at 46–47; Sameer M. Ashar, Law Clinics and Collective Mobilization, 14 CLIN. L. REV. 355 (2008).

³³ See infra Sections I.A, II.B, and III.A.

³⁴ See infra Section II.A.

potential representation will help transform data injustices by resisting carceral tech, or whether it will reinforce the status quo instead.³⁵

Section I contextualizes the problem of data injustice by describing the relationships between corporate data power, carceral tech, and algorithmic violence experienced disproportionately by structurally-marginalized communities. It points to the ways that tech regulation and reform advocacy tend to ignore structural issues that predate the advent of data-driven technologies, which in turn exacerbate the inequities. The main way this happens is by inadequately representing the needs and perspectives of directly-impacted people, overvaluing technical and legal expert perspectives instead. This Section ends with a brief discussion of tech clinics and their advocacy so far, focusing on the missed opportunities for more radical tech reform work that stems from a general lack of explicit, justice-oriented vision.

Section II introduces how data justice readiness can inform tech clinics' pedagogical design, especially client and project selection. This Section first explores how a variety of clinicians have adopted a PIC abolitionist vision to drive pedagogy, providing a useful example for tech clinicians who have not adopted an explicit transformative vision. It then offers an example of a data justice vision that focuses on issues at the intersection of data-driven technologies and social, racial, and economic justice, prioritizing clients and projects that are most likely to inspire data justice readiness—students' commitment and capability to confront data injustice in their future practice.

Section III applies the concept of data justice readiness to the practical process of choosing aligned clients and projects for tech clinics. First, the section details the data justice framework step by step, providing further guidance on how to apply the draft intake form provided in the Appendix. Next, the Section briefly discusses potential obstacles to this approach, and it ends with an application of the framework to three tech clinic projects as case studies. The Appendix offers language for a data justice-aligned mission statement, as well as a draft intake form based on the data justice framework.

The data justice framework is not intended to be an exclusive approach to selection decisions for tech clinics. Instead, it is an opportunity for reflection, a call for more intentionality, and a jumping-off point for future conversations around who tech clinics choose to represent and why.

I. THE DATAFIED STATUS QUO DEEPENS STRUCTURAL INEQUITIES

This Section explores the current landscape of data power—the companies, governments, and social relations that produce, use, and rely

³⁵ See infra Section III.A and Appendix.

on digital data in ways that deepen structural inequities.³⁶ The past two decades have been marked by data-driven technologies deepening social, racial, and economic injustices. In that time, nascent tech reforms have failed to alter the balance of data power, which is tipped in the favor of the tech industry today. Instead of pushing tech companies on whether to develop these harmful systems or state actors on whether to use them at all, the experts at the proverbial table remain stuck negotiating on the industry's terms, assuming technologies of social classification, control, and exile are a forgone conclusion.³⁷ While civil society organizations and regulatory bodies are increasingly aware of the need to include the voices of directly harmed communities, this has yet to translate into common practice in elite policy spaces. As a result, corporate data power remains largely unchecked by people power.

Tech clinics have been around for almost the same length of time and are growing in number and diversity.³⁸ These clinics provide students with learning opportunities to develop their tech law skills, and many also share a commitment to serving the public interest. While tech companies amass increasing data power and governments struggle to reign it back in, however, tech clinics must do more to align their clients and projects directly with the communities most harmed by data-driven technologies. They have an opportunity to turn away from fieldwork opportunities that advocate for the same, surface-level tech reforms that miss the deeper structural injustices reinforced by the datafied status quo.

A. Data Power, Carceral Technologies, and Algorithmic Violence

Tech companies have consistently promised that their commercial products would serve the public interest, advancing freedom, democracy, and social progress.³⁹ But with corporate technologies come corporate

³⁶ I use "inequities" instead of "inequalities" because while not all inequalities are unavoidable, inequities are both avoidable and unnecessary. Inequity refers to an unjust or unfair state that often produces inequalities. For example, gender-based pay inequality stems from societal inequity among different genders. These social conditions are unjust, unfair, avoidable, and changeable. Improving equity ideally minimizes inequality among different groups or individuals. *See Health Equity*, World Health Org., https://www.who.int/health-topics/health-equity (last visited Aug. 17, 2024).

³⁷ See Frank Pasquale, The Second Wave of Algorithmic Accountability, LPE Project (Nov. 25, 2019), https://lpeproject.org/blog/the-second-wave-of-algorithmic-accountability ("[A] second wave of research has asked whether [existing systems] should be used at all—and, if so, who gets to govern them"). See J.J. McCorvey, Workers Wrestled a Seat at the Table on AI This Year. Will It Be Enough?, NBC News (Dec. 27, 2023, 7:00 AM), https://www.nbcnews.com/business/business-news/workers-wrested-seat-table-ai-year-will-enough-rcna129040; David Keil, AI Is Eating the World. Grab a Seat at the Table, FAST Co. (Feb. 28, 2024), https://www.fastcompany.com/91035988/ai-is-eating-the-world-grab-a-seat-at-the-table.

³⁸ See Holland, supra note 25.

³⁹ See Amba Kak & Sarah Myers West, AI Now, AI Now 2023 Landscape: Confronting Tech Power 6 (Apr. 11, 2023), https://ainowinstitute.org/wp-content/

incentives, including growth, profit, and neutralizing market threats by acquiring competitors.⁴⁰ In two short decades, a handful of tech companies—Alphabet (Google's parent company), Amazon, Apple, Meta, and Microsoft—have amassed immense economic and political power, enabling them to expand into a wide variety of industries, from healthcare and education to banking and credit decisions.⁴¹ This power stems from their one-way accumulation of data, or digitally-configured information about peoples' actions, decisions, identities, opinions, and beyond.⁴² The companies with the biggest troves of data have risen to the top of the tech industry food chain, building on network effects and infrastructural advantages to attain market dominance.⁴³ For many experts, the main problem is this immense concentration of data power.⁴⁴

Data power is the ability to translate subjective, individual realities into a standardized pool of data, and to determine which forms that data should take, to what ends that data will be applied, and what values and meanings will be prioritized throughout the process. Data is produced relationally, and who gets to produce and control data is both "socially and legally determined." With any data-driven technology, there is the question of who is collecting data in a particular application and context, and whose data gets collected. Put differently, who has the power to turn most peoples' lives into data, and whose life experiences become most vulnerable to datafication?

uploads/2023/04/AI-Now-2023-Landscape-Report-FINAL.pdf; *see also* Brian Merchant, *Column: Social Media Promised Us Democracy — But Gave Us Dictatorships*, L.A. Times (July 10, 2023, 5:00 AM), https://www.latimes.com/business/technology/story/2023-07-10/column-social-media-promised-us-democracy-and-gave-us-dictatorship.

- ⁴⁰ See Kak & Myers West, supra note 39.
- 41 Id

⁴² See Becoming Data Episode 1: Data & Humanity, DATA & Soc'Y (May 17, 2021), https://listen.datasociety.net/episodes/becoming-data-data-social-life.

- ⁴³ See Kak & Myers West, supra note 39, at 23 (describing tech firms' data advantage as a "key source" of power).
 - ⁴⁴ See id. at 1.

⁴⁵ See Michael Whitelaw, Art Against Information: Case Studies in Data Practice, 11 FIBERCULTURE J. (2008), https://eleven.fibreculturejournal.org/fcj-067-art-against-information-case-studies-in-data-practice/ ("[Data is] a set of measurements extracted from the flux of the real. In themselves, such measurements are abstract, blank, meaningless. Only when organised and contextualised by an observer does this data yield information, a message or meaning."); Becoming Data, supra note 42, at 3:40 ("[D]ata are the things that a group measures and cares about, (1) things that can be measured and balancing that, too, with (2) the things that a group cares about.").

- ⁴⁶ Amy Kapczynski, *The Law of Informational Capitalism*, 129 YALE L.J. 1460, 1499 (2020).
- 47 Becoming Data, supra note 42, at 18:00.
- ⁴⁸ Data journalist Lam Thuy Vo provides a useful example to understand how the construction of data tends to value certain incentives and systems over others. In an interview, she asks listeners to imagine the data profiles of a single mother who is a woman of color. In her profile, there are many more datapoints documenting "bad" things she has done in the form of law enforcement interactions, unemployment benefits applications, eviction actions, and child

Datafication is the process of quantifying the "flux of reality" in a way that can be analyzed, usually by some form of computing technology. Datafication renders aspects of reality into something machine-readable that previously were not or could not be easily captured. For example, words from literary works have been datafied so that large tomes can be easily searchable and, eventually, machine learning algorithms can be trained to predict a combination of words that would qualify as a poem, a novel, or an email draft. Datafication is a two-part process: first, human experiences are transformed into data, and second, data and data-based insights are commodified. This mass appropriation of information is a type of extractivisim, with corporations as its primary authors and beneficiaries.

Today, the digital age is defined by corporate dominance over technology production, meaning that tech companies wield the greatest amounts of data power. In a couple of decades, tech companies have become infrastructural.⁵³ From cloud computing to digital advertising and payments, a small number of companies now control the means through which the wider technology ecosystem operates.⁵⁴ The tech industry's data power is built from collecting, controlling, and monetizing information necessary for a market economy. As various other industries integrate technology into their services, incumbent tech companies gain an additional source of economic power through the ability "to use their infrastructure, reach, and data assets to enter" new markets.⁵⁵ As a result, a handful of tech companies have become "the key intermediaries in our daily lives" by providing the hegemonic infrastructures much

services interactions, than datapoints demonstrating "good" things, like how she has tended to her family and the health of her community through paying rent, providing childcare, helping her neighbors, and more. This demonstrates how certain things are extremely difficult to capture as data, as well as how existing systems can determine the path of least resistance for what is datafied (and for what purposes). *See Becoming Data, supra* note 42, at 35:10.

⁴⁹ Whitelaw, *supra* note 45; Ulises A. Mejias & Nick Couldry, *Datafication*, 8 Internet Pol'y Rev. 1, 2 (2019).

⁵⁰ See Emily M. Bender, Timnit Gebru, Angelina McMillam-Major, & Shmargaret Shmitchell, On the Dangers of Stochastic Parrots: Can Language Models Be Too Big?: , in FAccT '21: Proceedings of the 2021 ACM Conference on Fairness, Accountability, and transparency 610 (2021), https://dl.acm.org/doi/pdf/10.1145/3442188.3445922.

⁵¹ Mejias & Couldry, supra note 49, at 3.

⁵² *Id.* at 7.

 $^{^{53}}$ Kak & Myers West, *supra* note 39, at 8.

⁵⁴ See id.; see also Karina Montoya, Amazon Exploits Its Cloud Monopoly To Build Advertising Business, Open Markets (Sept. 9, 2022), https://www.openmarketsinstitute.org/publications/amazon-exploits-its-cloud-monopoly-to-build-advertising-business.

⁵⁵ Pete Swabey & Martin Harraca, *Digital Power: How Big Tech Draws Its Influence*, TechMonitor (Feb. 16, 2021), https://techmonitor.ai/policy/big-tech/power-of-tech-companies.

of society uses to access information, work, community, necessities, and leisure.⁵⁶

With each use of a data-driven product, corporate data power increases at scale. By dint of existing in this environment, individuals are made legible through their everyday activities to the companies that make their devices and to data brokers, who package and sell digital data to various customers, including "governments, marketing firms, intelligence agencies, and political parties."57 Data-driven technologies convert vast populations into "unexplored territory," and the ability to process their personal information becomes "the newest form of bioprospecting," where all kinds of companies and interests race to identify patterns at scale and "extract their marketplace value." ⁵⁸ Collecting massive amounts of data has become imperative to achieving dominance in the tech industry, producing a "new logics of governance[] as human beings become trackable datasets."59 In this way, everyone is impacted whether or not they are direct users, as datafication increasingly diminishes the sense of control one has over important life decisions mediated by data-driven technologies.⁶⁰

From activists⁶¹ to legal scholars,⁶² diverse thinkers agree that this unchecked, corporate data power is a capitalistic phenomenon.⁶³ Although datafication is unique to the 21st century, its logics stem from a familiar, neoliberal political economy. The idea is that with more data comes better

⁵⁶ Kean Birch, *There Are No Markets Anymore: From Neoliberalism to Big Tech*, Transnat'l Inst. (Feb. 3, 2023), https://www.tni.org/en/article/there-are-no-markets-anymore; *see also* Salomé Viljoen, Jake Goldenfein & Lee McGuigan, *Design Choices: Mechanism Design and Platform Capitalism*, 8 Big Data & Soc'y 1 (2021), https://journals.sagepub.com/doi/10.1177/20539517211034312.

⁵⁷ Linnet Taylor, What Is Data Justice? The Case for Connecting Digital Rights and Freedoms Globally, 4 Big Data & Soc'y 1, 4 (2017), https://journals.sagepub.com/doi/epub/10.1177/2053951717736335.

⁵⁸ Julie E. Cohen, *The Surveillance-Innovation Complex: The Irony of the Participatory Turn 7, in* The Participatory Condition (Darin Barney et al. eds., 2015).

⁵⁹ Bhagat & Phillips, *supra* note 17, at 529.

⁶⁰ See Alfredo Lopez, Melanie Bush, Hamid Khan, and Ken Montenegro, We Thought It Was Fiction, RADICAL ECOLOGICAL DEMOCRACY (Sept. 18, 2021), https://radicalecologicaldemocracy.org/we-thought-it-was-fiction/.

⁶¹ See Slavery, the Origin Story, D4BL.ORG https://datacapitalism.d4bl.org/#chapter2-link (last visited Aug. 17,2024) (describing activist group Data for Black Lives' position that "data capitalism" drives extractive, exploitative technologies and is rooted in corporate commodification of human beings under slavery, perpetuated through social classifications reproduced in data).

⁶² See Julie E. Cohen, Between Truth and Power: The Legal Constructions of Informational Capitalism 5–6 (2019) (quoting Manuel Castells, The Rise of the Network Society 14–18 (2d ed., 2010)) (describing "informational capitalism"); Cohen, *supra* note 58, at 1 (describing the "surveillance-innovation complex" that renders surveillance "as a modality of economic growth").

⁶³ Cf. Yanis Varoufakis, Technofeudalism: What Killed Capitalism (2024) (arguing the current tech ecosystem has moved beyond capitalism towards a new form of technology-based feudalism).

solutions to complex, social issues, not through government services but exclusively through corporate innovations. This is a technosolutionst philosophy that assumes that most if not all human problems can be solved through technological innovation, especially in a "free-market" economy where companies compete to develop the most innovative and effective product solutions. ⁶⁴ Various devices, platforms, users, developers, legal forms, practices of prediction, and state interventions "enable new forms of digital capital accumulation" through amassing data.65 For example, rideshare companies position their services as a social good, enabling people to access transportation from wherever they are. But the real value for these companies derives from the real-time, expansive data generated from millions of users about traffic patterns and more. While deeply unprofitable, these companies still prosper because of this data power.⁶⁶ Meanwhile, the dominance of rideshare products fills the gap left open by disinvestment and de-prioritization of public mass transit options by government agencies.⁶⁷

Corporate data power is not formed in a vacuum but stems in part from a lack of largescale oversight for the tech industry. Tech companies have been able to set the terms for a wide variety of technology-dependent markets,⁶⁸ avoid tax responsibilities,⁶⁹ and innovate forms of

⁶⁴ See Evgeny Morozov, To Save Everything, Click Here: The Folly of Technological Solutionism (2013); David Harvey, Neoliberalism as Creative Destruction, 610 Annals Am. Acad. Pol. Sci. 22 (2007) ("[H]uman well-being can best be advanced by the maximization of entrepreneurial freedoms within an institutional framework characterized by private property rights, individual liberty, unencumbered markets, and free trade").

⁶⁵ Bhagat & Phillips, *supra* note 17, at 529; *see also* Richard Barbrok & Andy Cameron, *The Californian Ideology*, 6 Sci. Culture 44 (1996) (describing the "Californian Ideology" that powered early tech entrepreneurship as a "profound faith in the emancipatory potential of the new information technologies" whose advocates championed individual liberty within the digital marketplace and reduced power of the nation-state).

⁶⁶ See Kevin Roose, Farewell, Millennial Lifestyle Subsidy, N.Y. Times (June 8, 2021), https://www.nytimes.com/2021/06/08/technology/farewell-millennial-lifestyle-subsidy.html ("Uber, which raised nearly \$20 billion in venture capital before going public, may be the best-known example of an investor-subsidized service. During a stretch of 2015, the company was burning \$1 million a week in driver and rider incentives in San Francisco alone"); Nikil Saval, Uber and the Ongoing Erasure of Public Life, New Yorker (Feb. 18, 2019), https://www.newyorker.com/culture/dept-of-design/uber-and-the-ongoing-erasure-of-public-life.

⁶⁷ See Saval, supra note 66.

⁶⁸ While falling from market capitalization of over \$5 trillion in 2020, Big Tech companies still dominate: 81% of all general searches and 94% of all mobile searches use Google; 99% of smartphones use Android or iPhone operating systems; 80% of browsers are either Google Chrome or Apple Safari; Facebook, Instagram, Messenger, and WhatsApp have 2.47 billion daily active users between them; an estimated 50% of all U.S. e-commerce runs through Amazon; Amazon, Microsoft, and Google dominate cloud computing. Staff of S. Comm. on Antitrust, Commercial, and Admin. L. on the Judiciary, Rep. on Investigation of Competition in Digital Markets (Comm. Print 2020), https://www.govinfo.gov/content/pkg/CPRT-117HPRT47832/pdf/CPRT-117HPRT47832.pdf.

⁶⁹ See, e.g., Jim Tankersley, Tech Giants Shift Profits to Avoid Taxes. There's a Plan To Stop Them., N.Y. Times (Oct. 9, 2019), https://www.nytimes.com/2019/10/09/us/politics/

labor exploitation.⁷⁰ But the notion that tech companies have evaded state control distracts from the crucial role of state power—especially through law—in structuring and legitimizing corporate data power.⁷¹ From systemic tax evasion⁷² to lobbying lawmakers,⁷³ corporate data

tech-giants-taxes-oecd.html; Rupert Neate, 'Silicon Six' Tech Giants Accused of Inflating Tax Payments by Almost \$100bn, Guardian (May 31, 2021, 3:01 AM), https://www.theguardian.com/business/2021/may/31/silicon-six-tech-giants-accused-of-inflating-tax-payments-by-almost-100bn; Matthew Gardner, Amazon Avoids More Than \$5 Billion in Corporate Income Taxes, Reports 6 Percent Tax Rate on \$35 Billion of US Income, Inst. Tax. & Econ. Pol'y: Just Taxes (Feb. 7, 2022), https://itep.org/amazon-avoids-more-than-5-billion-in-corporate-income-taxes-reports-6-percent-tax-rate-on-35-billion-of-us-income; Paul Hannon & Richard Rubin, Big Tech's Love Affair With Low-Tax Nations Is Under Threat, Wall St. J. (July 12, 2023, 2:55 PM), https://www.wsj.com/articles/negotiators-see-global-deal-on-taxing-big-tech-companies-within-reach-36b47b10; Vice Media, Exposing How Apple and Nike Made Billions in the Bermuda Triangle, YouTube (July 27, 2023), https://www.youtube.com/watch?v=cbD8F9j0pGk.

⁷⁰ See, e.g., Ben Zipperer, Celine McNicholas, Margaret Poydock, Daniel Schneider, & Kristen Harknett, National Survey of Gig Workers Paints a Picture of Poor Working Conditions, Low Pay, Econ. Poù'y Inst. (June 1, 2022), https://www.epi.org/publication/gigworker-survey/; Paris Marx, Tech Giants Are Building a Dystopia of Desperate Workers and Social Isolation, Jacobin (Jan. 4, 2023), https://jacobin.com/2023/01/tech-friction-service-work-dystopia; Michael Sainato, Former Tesla Workers Claim They Were Fired for Using Maternity and Sick Leave, Guardian (July 9, 2019, 2:00 AM), https://www.theguardian.com/technology/2019/jul/09/tesla-workers-terminated-claim-maternity-sick-leave.

⁷¹ See Kapczynski, supra note 46; Amanda Parsons & Salomé Viljoen, Valuing Social Data, 124 Colum. L. Rev. 993 (2024) (providing examples from tax and data privacy law); See also Bhagat & Phillips, supra note 17, at 529 ("As legal scholars have argued... the emergence of the platform business model has required extensive state action, through the reworking of existing regulatory frameworks, the institutional reinforcement of pro-market ideologies, and the introduction of new laws."); Amanda Ballantyne, Patrick Woodall, Katie Corrigan, & Edward Wytkind, Crafting an Innovation Ecosystem that Works for Working People, 34 New England J. Pub. Pol'y 1, 6 (2022) (discussing the reliance of several corporate technologies today on innovations from billion-dollar government research initiatives funded by taxpayers).

Tax Rate Because It's 'Unfair,' The Intercept (Aug. 16, 2016, 3:25 PM), https://theintercept.com/2016/08/16/ceo-tim-cook-decides-apple-doesnt-have-to-pay-corporate-tax-rate-because-its-unfair/ (quoting interview with Apple CEO Tim Cook where he warns that Apple's \$181 billion tax liability stored in overseas tax havens will not be paid "until there's a fair rate" of taxation on corporate income); Jeffrey Dastin, Amazon Receives 238 Proposals for Its Second Headquarters, Reuters (Oct. 23, 2017, 8:15 PM), https://www.reuters.com/article/us-amazon-com-headquarters/amazon-receives-238-proposals-for-its-second-headquartersidUSKBN1CS21O/ (noting Amazon's promise to invest over \$5 billion and create up to 50,000 jobs for the new host city); but see Scott Cohn, Amazon HQ2 Is Not Matching the Original Hype. The Economy Is Partly to Blame, CNBC (June 20, 2023, 8:15 AM), https://www.cnbc.com/2023/06/20/amazon-hq2-is-not-matching-original-hype-economy-is-partly-to-blame.html (noting Amazon has largely failed to deliver on these promises).

⁷³ See, e.g., Will Henshall, There's an AI Lobbying Frenzy in Washington. Big Tech Is Dominating, Time (Apr. 30, 2024, 1:05 PM), https://time.com/6972134/ai-lobbying-tech-policy-surge/; Put the Public in the Driver's Seat: Shadow Report to the US Senate AI Policy Roadmap 4, 7 (2024), https://static1.squarespace.com/static/66465fcd83d1881b-974fe099/t/664e009cc00ce7596e9fff06/1716387997161/24.05.18+-+AI+Shadow+Report+V5. pdf ("During these forums, some of the loudest and most self-serving voices from industry, including Elon Musk, Sam Altman, Marc Andreesen, and Hoan Ton-That, were invited to share their views with lawmakers and their staff behind closed doors."); See Brendan

power preserves itself from political action designed to weaken or redistribute it for the public's benefit. In many cases, data power has taken on a structural element, where the state's massive investments of energy and public resources into tech companies' promised solutions have turned government into "an accomplice [] of the interests of big business."⁷⁴

State actors are often eager customers for corporate tech products built through datafication. Data power flows further from the enmeshment of the state and tech industry in a neoliberal pact where the latter hoovers up data to produce and sell technologies that serve the former's needs. Both state and corporate actors share a desire for new methods of social control as a matter of "security" and discipline for the state, and as a matter of profit for the corporations. So far, the complex relationship between state and digital power has been one of "deepening integration between the technology ecosystem and the carceral arm of the neoliberal state. To In the last decade alone, data-driven technologies have enmeshed private technology companies within policing, mmigration enforcement, healthcare, welfare administration, and

Bordelon & Alfred Ng, *Tech Lobbyists Are Running the Table on State Privacy Laws*, Politico (Aug. 16, 2023, 4:30 AM), https://www.politico.com/news/2023/08/16/tech-lobbyists-state-privacy-laws-00111363; *see also* Inci Sayki, *Big Tech Lobbying on AI Regulation as Industry Races to Harness ChatGPT Popularity*, OPEN SECRETS (May 4, 2023, 9:35 AM), https://www.opensecrets.org/news/2023/05/big-tech-lobbying-on-ai-regulation-as-industry-races-to-harness-chatgpt-popularity/; Suzanne Smalley, *In Patchwork of State Privacy Legislation, Tech Lobby Sees a Single Battlefield*, The Record (Jan. 30 2024), https://therecord.media/state-data-privacy-legislation-technology-industry-lobbying; Todd Feathers & Alfred Ng, *Tech Industry Groups Are Watering Down Attempts at Privacy Regulation, One State at a Time*, The Markup (May 26, 2022, 10:33 AM), https://themarkup.org/privacy/2022/05/26/tech-industry-groups-are-watering-down-attempts-at-privacy-regulation-one-state-at-a-time (noting that in 31 states considering privacy bills in 2021 and 2022, 445 active lobbyists and firms representing Amazon, Meta, Microsoft, Google, Apple, and industry groups shaped the final bills).

- ⁷⁴ 6 John Dewey, The Later Works, 1925–1953: Essays, Reviews, and Miscellany (1931-1932) at 163 (Jo Ann Boydston ed., 2008).
- 75 Hannah Bloch-Wehba, Algorithmic Governance from the Bottom Up, 48 B.Y.U. L. Rev. 69, 82 (2022).
- ⁷⁶ Bhagat & Phillips, *supra* note 17, at 535; *see also* Bloch-Wehba, *supra* note 75, at 82 ("The expansion of algorithmic governance is a logical consequence of policy that values efficiency, markets, and privatization.").
- 77 See Elizabeth E. Joh, The Undue Influence of Surveillance Technology Companies on Policing, 92 N.Y.U. L. Rev. 19 (2017); Katie Hawkins, NYC Police Have Spent Millions on Tech Company That Claims It Can Use AI to Monitor Social Media and Predict Future Criminals, Bus. Insider (Sept. 10, 2023, 10:07 AM), https://www.businessinsider.com/nypd-new-york-police-voyager-labs-social-media-surveillance-crime-2023-9.
- ⁷⁸ See Sarah R. Sherman-Stokes, *Immigration Detention Abolition and the Violence of Digital Cages*, 95 U. Colo. L. Rev. 219 (2024).
- ⁷⁹ See Sai Balasubramanian, Google Is Rapidly Becoming a Healthcare Powerhouse, Forbes (Aug. 21, 2023, 7:48 AM), https://www.forbes.com/sites/saibala/2023/08/21/google-is-rapidly-becoming-a-healthcare-powerhouse/?sh=3000fcc43e8e.
- ⁸⁰ See Thomas McBrien, Ben Winters, Enid Zhou, & Virginia Eubanks, Elec. Privacy Info. Ctr., Screened & Scored in the District of Columbia (2022), https://epic.org/wp-content/uploads/2022/11/EPIC-Screened-in-DC-Report.pdf.

more,⁸¹ challenging the state's monopoly on force as state actors increasingly rely on these companies' products to classify, track, and secure structurally-marginalized groups.⁸²

While our everyday dependence on data-driven technologies helps cement data power, their development and sale are often specifically geared towards facilitating the state's program of classifying, tracking, and disciplining certain populations over others.⁸³ The profit-seeking priorities of the tech industry are brought into alignment with the priorities of the state to "discipline[e] and manag[e]" populations experiencing social insecurity due, in large part, to the shrinking of government care.84 According to activist Sarah T. Hamid of the Carceral Tech Resistance Network (CTRN), carceral tech are datadriven technologies used by the state in the process of policing, border enforcement, and ongoing commercial partnerships. They are fundamentally technologies of classification, containment, and social control of structurally-marginalized groups.⁸⁵ Carceral tech includes, but is not limited to, predictive policing technologies, facial recognition applications, anomaly detection algorithms, DNA and biometric databases, acoustic gunshot detection, drones, digital location monitoring, and criminal risk profiling algorithms.⁸⁶

Carceral tech is particularly dangerous in law enforcement, prison, and detention contexts, where its harms fall hardest on specific communities bound up in systems of carceral control. They do not threaten everybody equally—this mischaracterization may be well-intentioned coming from data privacy advocates, but it shifts attention away from what directly impacted communities are experiencing and want to contest.⁸⁷ When carceral tech proves to be effective on a local scale, it can later "travel to other contexts" through a cycle of mass

⁸¹ See Nadiyah J. Humber, A Home for Digital Equity: Algorithmic Redlining and Property Technology, 111 CAL. L. REV. 1421 (2023) (discussing the advent of property technology, data-driven products used primarily by landlords to assess prospective tenants).

⁸² See Bhagat & Phillips, supra note 17, at 526.

⁸³ Community Defense: Sarah T. Hamid on Abolishing Carceral Technologies, Logic(s) Mag.: Care (Aug. 31, 2020), https://logicmag.io/care/community-defense-sarah-t-hamid-on-abolishing-carceral-technologies.

⁸⁴ Bhagat & Phillips, *supra* note 17, at 527; *see also id.* (discussing how the "void left by social welfare retrenchment" has engendered "workfare (which entails forced participation in unstable and poorly paid employment as a condition for receiving social benefits), prison-fare (which entails a criminalization of poverty and the crafting of policies that extend the reach of police, courts, jails, and prisons), and debtfare (which normalizes and encourages reliance on private sources of credit to augment wages and regulate social insecurity)"). The authors offer "techfare" as the next iteration of this process, part of a "broader project of governing social insecurity and marginality in advanced capitalist countries." *Id.*

⁸⁵ Abolishing Carceral Technologies, supra note 83. See Powell, supra note 20.

 $^{^{86}}$ Id.; see also Bhagat & Phillips, supra note 17 (describing carceral technologies in relation to the PIC).

⁸⁷ Abolishing Carceral Technologies, supra note 83.

commercialization.⁸⁸ But these technologies first and foremost affect the poor, racialized, and overpoliced, whose voices are often missing in discussions of privacy rights and tech policy. This has historically affected communities of color because carceral technologies further the work of the racist institution of policing, meant to limit populations that are already disadvantaged in a country built on the legacy of slavery.⁸⁹ Corporate, carceral tech have become the default tools for state violence, and their integration into situations already "fraught with power disparities" has increased corporate data power while disempowering structurally-marginalized groups further.⁹⁰

As tech companies enact their data power through carceral tech, structural inequities deepen. Carceral tech present new methods to sort, profile, exploit, and discriminate, with seemingly no way for targeted communities to impede their deployment or even know about their deployment before a critical mass of people have been harmed. Algorithmic violence refers to the level of algorithmic violence. Algorithmic violence refers to the violence that data-driven, automated processes inflict by preventing people from meeting their basic needs. It results from the incorporation of huge datasets into computation systems producing a more hierarchical and unequal society. Algorithmic violence has the "power to cloak and amplify" existing inequities that suddenly feel new just because of the digital context.

Algorithmic violence strikes most intensely where social, racial, and economic injustices linger, largely because the lack of adequate social services equates to potential business opportunities for data-driven "solutions." People who experience algorithmic violence most acutely are often part of multiple marginalized communities; intersectional

⁸⁸ Id. ("[I]f you are organizing from an abolitionist perspective, you recognize that the private rollout of this technology is still a carceral technology. These technologies never exist without their carceral counterpart.").

⁸⁹ See id. ("Carceral technologies are racist because the institutions that develop and use them are intended to manage populations in a country that has a white supremacist inheritance."); see generally Benjamin, supra note 22.

⁹⁰ Bloch-Wehba, *supra* note 75, at 82.

⁹¹ See J. Khadijah Abdurahman, FAT* Be Wilin', Medium (Feb. 24, 2019), https://upfromthecracks.medium.com/fat-be-wilin-deb56bf92539 ("[I]t's not just that classification systems are inaccurate or biased, it is who has the power to classify, to determine the repercussions / policies associated thereof and their relation to historical and accumulated injustice?").

⁹² See Data Harm Record (Updated), DATA JUSTICE LAB, https://datajusticelab.org/dataharm-record/ (last updated Aug. 2020) (surveying various data harms).

⁹³ See Mimi Onuoha, Notes on Algorithmic Violence, GITHUB (Feb. 8, 2018), https://github.com/MimiOnuoha/On-Algorithmic-Violence; Anna Lauren Hoffman, Data Violence and How Bad Engineering Can Damage Society, МЕДІИМ (Apr. 30, 2018), https://medium.com/@annaeveryday/data-violence-and-how-bad-engineering-choices-can-damage-society-39e44150e1d4.

⁹⁴ Onuoha, supra note 93.

identities introduce multiple axes for social stratification through automated processes. Data-driven carceral tech in schools, 95 workplaces, 96 overpoliced communities, 97 under-resourced neighborhoods, 98 credit-dependent ventures, 99 elder care facilities, 100 and beyond worsen social conditions for impacted members of IBPOC communities, 101 the poor and economically underserved, 102 2SLGBT+ communities, 103

⁹⁵ See, e.g., Ctr. for Democracy & Tech., Hidden Harms: Targeting LGBTQ+ Students (2022), https://cdt.org/wp-content/uploads/2022/10/2022-10-14-Civic-Tech-Hidden-Harms-Targeting-LGBTQ-Students-Brief-final.pdf; Simon Coghlan, Tim Miller, & Jeannie Paterson, Good Proctor or "Big Brother"? Ethics of Online Exam Supervision Technologies, 34 Phil. & Tech. 1581 (2021).

⁹⁶ See, e.g., Annette Bernhardt, Lisa Kresge & Reem Suleiman, The Data-Driven Workplace and the Case for Worker Technology Rights, 76 I.L.R. Rev. 3 (2023).

⁹⁷ See, e.g., Cory Doctorow, Why Big Tech, Cops, and Spies Were Made for One Another, The Intercept (Oct. 16, 2023, 6:00 AM), https://theintercept.com/2023/10/16/surveillance-state-big-tech/; Edward Gates, Predictive Policing in LA: LAPD Employs Palantir for Surveillance, Am. Jud. Sys. (Apr. 29, 2023), https://www.ajs.org/predictive-policing-in-la-lapd-employs-palantir-for-surveillance/; Matene Toure, In New York City, Surveillance Technology Expands the Carceral State, Prism (Apr. 5, 2023), https://prismreports.org/2023/04/05/new-york-surveillance-technology-carceral/; but see Patrick Sisson, In (and Above) Beverly Hills, Police Are Watching, Bloomberg (Jan. 23, 2023, 9:10 AM), https://www.bloomberg.com/news/features/2023-01-19/in-beverly-hills-police-surveillance-technology-takes-off.

⁹⁸ See, e.g., Erin McElroy, Paula Garcia-Salazar, & Manon Vergerio, Landlord Technologies of Gentrification: Facial Recognition and Building Access Technologies in New York City Homes (2022), https://static1.squarespace.com/static/52b7d7a6e4b0b3e-376ac8ea2/t/63601bd6c1d8e23287357db0/1667242990765/AEMP-LLTech-Final-r2.pdf.

⁹⁹ See, e.g., Humber, supra note 81; Kaveh Waddell, How Tenant Screening Reports Make It Hard for People to Bounce Back from Tough Times, Consumer Reps. (Mar. 11, 2021), https://www.consumerreports.org/algorithmic-bias/tenant-screening-reports-make-it-hard-to-bounce-back-from-tough-times/; Jennifer Miller, Is An Algorithm Less Racist Than a Loan Officer?, N.Y. Times (Sept. 18, 2020), https://www.nytimes.com/2020/09/18/business/digital-mortgages.html.

¹⁰⁰ See, e.g., Clara Berridge & Alisa Grigorovich, Algorithmic Harms and Digital Ageism in the Use of Surveillance Technologies in Nursing Homes, 7 Frontiers Socio. 1 (2022); Alisa Frik, Leysan Nurgalieva, Julia Bernd, Joyce Lee, Florian Schaub, & Serge Egelman, Privacy and Security Threat Models and Mitigation Strategies of Older Adults, USENIX 21 (2019), https://www.usenix.org/system/files/soups2019-frik.pdf.

¹⁰¹ See Our Cities, Our Data Bodies, https://www.odbproject.org/our-cities/ (last visited Aug. 18, 2024); see generally Велјаміл, supra note 22. I use the terms "IBPOC" and "2SLGBT+" to center indigenous identities. See Elizabeth (Dori) Turnstall, Decolonizing Design: A Cultural Justice Guidebook 18 (2023).

¹⁰² See Karen Hao, The Coming War on the Hidden Algorithms that Trap People in Poverty, MIT TECH. Rev. (Dec. 4, 2020), https://www.technologyreview.com/2020/12/04/1013068/algorithms-create-a-poverty-trap-lawyers-fight-back/.

¹⁰³ See Morgan Klaus Scheuerman, Jacob M. Paul, & Jed R. Brubaker, How Computers See Gender: An Evaluation of Gender Classification in Commercial Facial Analysis Services, 3 Proc. ACM Human-Computer Interaction 1 (2019); Alejandra Caraballo, Remote Learning Accidentally Introduced a New Danger for LGBTQ Students, Slate (Feb. 24, 2022, 9:00 AM), https://slate.com/technology/2022/02/remote-learning-danger-lgbtq-students.html; James Vincent, Transgender YouTubers Had Their Videos Grabbed to Train Facial Recognition Software, The Verge (Aug. 22, 2017, 9:44 AM), https://www.theverge.com/2017/8/22/16180080/transgender-youtubers-ai-facial-recognition-dataset.

incarcerated folks,¹⁰⁴ migrants and asylum seekers,¹⁰⁵ people with disabilities,¹⁰⁶ and laborers, especially in gig economy jobs,¹⁰⁷ sex work,¹⁰⁸ factories,¹⁰⁹ and agricultural work.¹¹⁰ Carceral tech do not serve these communities' needs because they are not designed or deployed to do so. So long as they enhance corporate data power while furthering the neoliberal state's project of classifying and controlling certain populations, they are working as intended. Underlying systemic issues remain unchanged.

Ultimately, tech companies datafy certain groups and shore up their data power. Through the deployment of carceral technologies, their products drive data-based forms of inequity. Algorithmic violence is the result of this process, and while structurally-marginalized communities experience this violence most directly, every data subject is complicit in the classifications-based insights produced through data analysis. Currently, communities are subjected to corporate data power but lack largescale people power to counter the tech industry's fixation with commodifying daily life into data, converting social problems into product solutions, and placing immense profits that result into shareholders' pockets instead of investing them back into communities' backyards. ¹¹¹ In order to stand outside of datafication, one must first understand how

¹⁰⁴ See Matt Burgess, This Surveillance System Tracks Inmates Down to Their Heart Rate, WireD (June 11, 2023, 2:00 AM), https://www.wired.co.uk/article/prison-wristband-talitrix-tracking.

¹⁰⁵ See Mordan Meaker, The UK's GPD Tagging of Migrants Has Been Ruled Illegal, Wired (Feb. 29, 2024, 7:01 PM), https://www.wired.com/story/gps-ankle-tags-uk-privacy-illegal/; Tonya Riley, How a Private Company Helps ICE Track Migrants' Every Move, Cyberscoop (Sept. 26, 2023), https://cyberscoop.com/ice-bi-smartlink/; Johana Bhuiyan, Poor Tech, Opaque Rules, Exhausted Staff: Inside the Private Company Surveilling US Immigrants, Guardian (Mar. 7, 2022, 7:48 PM), https://www.theguardian.com/us-news/2022/mar/07/us-immigration-surveillance-ice-bi-isap.

¹⁰⁶ See Meredith Whittaker, Meryl Alper, Cynthia L. Bennett, Sara Hendren, Liz Kaziunas, Mara Mills, Meredith Ringel Morris, Joy Rankin, Emily Rogers, Marcel Salas, & Sarah Myers West, AI Now Inst, Disability, Bias, and AI (2019), https://ainowinstitute.org/wp-content/uploads/2023/04/disabilitybiasai-2019.pdf.

¹⁰⁷ See Zephyr Teachout, Surveillance Wages: A Taxonomy, LPE Project (Nov. 6, 2023), https://lpeproject.org/blog/surveillance-wages-a-taxonomy/; Shruti Sannon, Billie Sun, & Dan Cosley, Privacy, Surveillance, and Power in the Gig Economy, Chi Con. Hum. Factors Comp. Sys. (2022).

¹⁰⁸ See Thomas Brewster, Amazon, Ashton Kutcher and America's Surveillance of the Sex Trade, Forbes (Dec. 9, 2022, 7:00 AM), https://www.forbes.com/sites/thomasbrewster/2022/12/09/amazon-ashton-kutcher-sex-work-surveillance/; Olivia Snow, Are You Ready to Be Surveilled Like a Sex Worker?, WIRED (June 27, 2022, 10:44 AM), https://www.wired.com/story/roe-abortion-sex-worker-policy/.

¹⁰⁹ See AI-Enabled Monitoring of Factory Workers, Vantiq.com, https://vantiq.com/connect/solution/ai-watching-system-for-factory-workers/ (last visited Aug. 20, 2024).

¹¹⁰ See Gabriela Calugay-Casuga, Ontario Farm Workers' Health Threatened by Surveillance Technology, RABBLE.CA (Oct. 19, 2023), https://rabble.ca/labour/ontario-farm-workers-health-threatened-by-surveillance-technology/.

¹¹¹ See Swabey & Harraca, supra note 55.

the promises of tech companies have failed to materialize for the most disempowered, further deepening structural inequities rather than solving them. This requires reformers to ground tech advocacy in their experiences of harm, in their own voices.

B. Expert-Driven Tech Reforms Often Fail to Represent Communities Experiencing Algorithmic Violence Adequately

In the U.N. Secretary-General AI Advisory Body's latest report, the Body recognizes that the perspectives of communities directly impacted by new technologies "have been largely missing" from governance discussions. Whose voices typically dominate conversations about the datafied status quo? Expert academics, researchers, lawyers, and policy professionals whose "first wave" concerns largely focus on "improving existing systems" without altering the data power disparities underneath. 113

The conventional tech reformist agenda often revolves around fairness, accountability, and transparency suggestions that attempt to improve or "fix" data-driven technologies, focusing regulatory efforts on "adjudicating" negative "downstream impact[s]." These suggestions often do not come from communities experiencing algorithmic violence directly. Instead, they come from technocratic experts and result in further investments into the tech industry, shoring up its power, legitimacy, and resources. To example, calls for reform around data curation or algorithmic auditing require further funding and resources to enhance systems used in surveillance and policing, most often targeting structurally-marginalized communities. Despite the indeterminacy

¹¹² AI Advisory Bd., United Nations, Interim Report: Governing AI for Humanity 5 (2023), https://www.un.org/sites/un2.un.org/files/ai_advisory_body_interim_report.pdf (calling for a "more cohesive, inclusive, participatory, and coordinated approach").

¹¹³ Pasquale, supra note 37.

¹¹⁴ Julia Powles & Helen Nissenbaum, *The Seductive Diversion of 'Solving' Bias in Artificial Intelligence*, Medium (Dec. 7, 2018), https://onezero.medium.com/the-seductive-diversion-of-solving-bias-in-artificial-intelligence-890df5e5ef53. A full discussion of fairness, accountability, and transparency reforms is beyond the scope of this article but has been skillfully dissected by others. For a comprehensive analysis of these popular reforms and their shortcomings, see Bloch-Wehba, *supra* note 75.

¹¹⁵ See Abolishing Carceral Technologies, supra note 83 ("We have to recognize that technological innovation, and the reformism that animates it, is a carceral tactic. It's a means by which these systems have expanded over time."); Bloch-Wehba, supra note 75, at 73 ("[L]egal scholars and policymakers have largely overlooked grassroots opposition to these arrangements.").

 $^{^{116}}$ Yadren Katz, Artificial Whiteness: Politics and Ideology in Artificial Intelligence 142 (2020).

¹¹⁷ See Ryan Heath, Everybody Wants to Audit AI, But Nobody Knows How, Axios (Feb. 7, 2024), https://www.axios.com/2024/02/07/ai-regulation-biden-openai.

and ineffectiveness¹¹⁸ of AI auditing, companies and organizations are forming a cottage industry to potentially "audit-wash" harmful carceral tech.¹¹⁹

In part, this is because critical experts are often "enmeshed in the corporate world," which tends to limit their criticisms. ¹²⁰ This is exacerbated by the "revolving door" between the tech industry and regulatory personnel. ¹²¹ All but one member of the European Commission's expert group on AI represent business interests. ¹²² All twelve former U.S. national security officials who warned against pursuing antitrust enforcement of big tech companies are connected to those same companies. ¹²³ Under former White House Chief Science Advisor Eric Lander, more than a dozen staff members of the Office of Science and Technology Policy had some relationship to Eric Schmidt, the ex-CEO of Google, or were on his payroll. ¹²⁴

In these top-down discussions, experts propose reforms that might tweak the technology in question through minimal reporting or ethics requirements, largely ignoring the root issue of corporate data power's impact on structural inequities. Their suggestions do not question whether the tech industry should have so much power over what gets built, how, and why in the first place. Their focus on ethical AI, algorithmic accountability, and unbiased tech ignores the needs of the communities who experience these entities "violent decisions" and the underlying conditions that enable such violence to occur. They advocate for subtle policies that assume that with minimal interventions, the vast and complex tech industry can be reformed. These dominant approaches are technocratic and fail to consider how popular mobilization can support a more radical vision of change that benefits those

¹¹⁸ Alex C. Engler, *Independent Auditors Are Struggling to Hold AI Companies Accountable*, Fast Co. (Jan. 26, 2021), https://www.fastcompany.com/90597594/ai-algorithm-auditing-hirevue.

¹¹⁹ See Ellen P. Goodman & Julia Tréhu, AI Audit-Washing and Accountability, German Marshall Fund (2022), https://www.gmfus.org/sites/default/files/2022-11/Goodman%20%26%20Trehu%20-%20Algorithmic%20Auditing%20-%20paper.pdf; see also Caitlin Andrews, New Association Wants to Professionalize the AI Auditing Industry, IAPP (Dec. 20, 2023), https://iapp.org/news/a/a-new-association-wants-to-professionalize-the-ai-auditing-industry.

¹²⁰ KATZ, *supra* note 116, at 133.

¹²¹ KAK & MYERS WEST, supra note 39, at 58.

¹²² See Camille Schyns, Greta Rosén Fondahn, Alina Yanchur, & Sarah Pilz, *How Big Tech Dominates EU's AI Ethics Group*, EU Observer (Nov. 3, 2021, 1:03 AM), https://euobserver.com/investigations/153386.

¹²³ See Emily Birnbaum, 12 Former Security Officials Who Warned Against Antitrust Crackdown Have Tech Ties, Politico (Sept. 22, 2021, 6:28 PM), https://www.politico.com/news/2021/09/22/former-security-officials-antitrust-tech-ties-513657.

¹²⁴ See Alex Thompson, A Google Billionaire's Fingerprints Are All Over Biden's Science Office, Politico (Mar. 28, 2022, 4:30 AM), https://www.politico.com/news/2022/03/28/google-billionaire-joe-biden-science-office-00020712.

¹²⁵ Bloch-Wehba, *supra* note 75, at 111.

¹²⁶ KATZ, supra note 116, at 128–29; see also generally Bloch-Wehba, supra note 75.

¹²⁷ KATZ, *supra* note 116, at 134.

lacking data power today. Their narrow focus on improving carceral tech "reaffirm powerful actors' control over algorithmic design, use, and policy. These reforms reach for the low-hanging fruit—tweaking technologies on the surface level without engaging with more systemic issues that predate the datafied status quo. 130

Even well-meaning nonprofit and civil society organizations struggle to adequately represent directly impacted communities effectively. When it comes to data issues, civil society activity has been "relatively fragmented" due to a misperception that digital rights and social justice have "separate agendas." This perceived separation is the root of the issue, with technology-focused, digital rights organizations remaining too isolated from directly impacted communities, unable to incorporate their lived experiences of social, racial, and economic injustices into their tech reform agendas. Recently, in the wake of a so-called racial reckoning, several groups have begun to bridge the gap by supporting racial justice and tech issues, with many civil liberties and privacy organizations endorsing civil rights-styled policies. Still, these organizations often lack diverse experts internally and are weary to speak for or over communities with whom they lack strong connections.

¹²⁸ Bloch-Wehba, *supra* note 75, at 73.

¹²⁹ *Id.* at 110; *see also Abolishing Carceral Technologies, supra* note 83 ("In many ways, saying that you need a more diverse, minority-sensitive tech company is like saying you need more diverse prison guards.").

¹³⁰ See Technology Can't Fix This, 2 NATU. MACH. INTEL. 363 (2020), https://www.nature.com/articles/s42256-020-0210-5 (focusing on structural racism).

¹³¹ Arne Hintz, Lina Dencik, Joanna Redden, Emiliano Treré, Jess Brand, & Harry Warne, Data Justice Lab, Civic Participation in the Datafied Society: Towards Democratic Auditing? 165 (2022), https://datajusticelab.org/wp-content/uploads/2022/08/CivicParticipation_DataJusticeLab_Report2022.pdf

¹³² See *îd*.

¹³³ See Michele L. Norris, Don't Call It a Racial Reckoning. The Race Towards Equality Has Barely Begun, Wash. Post (Dec. 18, 2020, 1:41 PM), https://www.washingtonpost.com/opinions/dont-call-it-a-racial-reckoning-the-race-toward-equality-has-barely-begun/2020/12/18/90b65eba-414e-11eb-8bc0-ae155bee4aff_story.html; The Racial Reckoning That Wasn't, NPR: Code Switch Podcast (June 9, 2021, 1:46 AM), https://www.npr.org/transcripts/1004467239.

¹³⁴ See, e.g., Coalition Letter to Senate and House Leaders on Privacy and Civil Rights Principles, (Feb. 13, 2019), https://civilrightsdocs.info/pdf/policy/letters/2019/Roundtable-Letter-on-CRBig-Data-Privacy.pdf (coalition of organizations supporting privacy legislation in line with "Civil Rights Principles for the Era of Big Data" that would protect "against uses of consumer information that concentrate harms on marginalized communities while concentrating profits elsewhere.").

¹³⁵ See generally TSION TESFAYE, PUBLIC KNOWLEDGE, DIVERSITY IN EARLY-CAREER TECH POLICY ROLES: CHALLENGES AND OPPORTUNITIES 6 (2021), https://publicknowledge.org/wp-content/uploads/2021/11/Diversity-in-Early-Career-Tech-Policy-Roles_Public-Knowledge.pdf (one commenter stating, "[i]t is sad to see that there are so few people [in tech policy organizations] who look like the majority of the consumers they claim to advocate on behalf of."); see also id. at 7 (one commenter stating, "[j]ust because you care about people of color doesn't mean that you know what's best for people of color.").

Many of these organizations recognize the importance of seeking direct contact with affected individuals, gathering their stories first to better understand how datafication negatively impacts specific communities, and second, to better reach, represent, and work on behalf of these groups. When direct contacts are hard to nurture, advocates still strive to understand their lived experiences through social case workers, debt counselors, and others working directly within local communities. But these efforts cannot replace the need for communities to share their perspectives directly to inform tech policy choices. These same organizations acknowledge the need to "better represent affected communities in relation to data governance and data harm." 138

Instead of pushing tech companies on whether to develop carceral tech or state actors on whether to use them at all, the tech reform conversation remains stuck on the industry's terms, assuming adoption of carceral tech as a forgone conclusion. While civil society organizations and regulatory bodies are increasingly aware of the need to include the voices of directly harmed communities, this has yet to translate into common practice in elite policy spaces. As a result, corporate data power remains largely unchecked by people power.

C. Tech Clinics Can Do More to Challenge the Datafied Status Quo

Tech clinics have been around for a couple of decades, but more recently law schools offering tech clinics have grown about 58% from around 21 programs in 2013–2014 to around 36 in 2022–2023. Let Clinics are difficult to place into one, unified category. They all expose students to live tech law issues, but they do so through a broad variety of topic areas, client types, and legal services. There are the intellectual property (IP)-forward clinics, which prioritize clients with IP issues as new technologies push the boundaries of traditional IP rights. Let

¹³⁶ Hintz et al., *supra* note 131, at 117.

¹³⁷ See id. at 116.

¹³⁸ Id. at 165.

¹³⁹ See Pasquale, supra note 37 ("[A] second wave of research has asked whether [existing systems] should be used at all—and, if so, who gets to govern them").

¹⁴⁰ Robert R. Kuehn, David A. Santacroce, Margaret Reuter, June T. Tai, & G.S. Hans, 2022–2023 Survey of Applied Legal Education, Ctr. for the Study of Applied Legal Education (Ctr. for the Study of Applied Legal Education), Ctr. for the Study of Applied Legal Education (Ctr. for the Study of Applied Legal Education), Ctr. for the Study of Applied Legal Education (Ctr. for the Study of Applied Legal Education), Ctr. for the Study of Applied Legal Education (Ctr. for the Study of Applied Legal Education), Ctr. for the Study of Applied Le

¹⁴¹ See, e.g., Intellectual Property and Information Policy Clinic, GEO. L., https://www.law.georgetown.edu/experiential-learning/clinics/our-clinics/intellectual-property-and-information-policy-clinic/ (last visited Aug. 20, 2024) (guiding students "through a range of non-litigation work on behalf of non-profits, coalitions, and fellow students who engage with IP or information policy issues" from a "social justice perspective"); Intellectual Property

clinics often serve small businesses and legally underserved clients navigating rights acquisitions and other challenges, especially concerning trademark and copyright. Then, there are a few emergent social justice-forward clinics representing cases at the intersection of tech law and social justice issues, with at least one clinic overlapping with the IP camp. Finally, there are the generalist tech law and policy clinics, which often handle a combination of IP and informational privacy, telecommunications, and accessibility matters. The generalist clinics also

& Technology Law Clinic, Geo. WASH. UNIV. L. Sch., https://www.law.gwu.edu/intellectualproperty-technology-law-clinic (last visited Aug. 20, 2024) (giving students the chance to practice "as intellectual property law counsel on behalf of individual inventors, entrepreneurs, authors, artists, and other clients"); Intellectual Property and Technology Law Clinic (IPTLC), USC GOULD Sch. L., https://gould.usc.edu/academics/experiential/clinics/iptlc/ (last visited Aug. 20, 2024) (describing how copyright and trademark laws "are more complex than ever" due to the globalized technology economy); Brooklyn Law Incubator & Policy Clinic, BROOK. L. Sch., https://www.brooklaw.edu/academics/clinics%20and%20externships/in-house%20 clinics/blip (last visited Aug. 20, 2024) (positioning the Clinic as a "modern, technology-oriented law firm" and primarily serving start up and business clients, including through a patent law practice); Glushko-Samuelson Intellectual Property Law Clinic, Am. Univ. Wash. Coll. L., https://ipclinic.org/ (last visited Aug. 20, 2024) (advising "artists, non-profit organizations, small inventors and entrepreneurs, scholars, traditional communities, and others" on "copyright, patent, trademark," and related legal matters); New Media Rights' Intellectual Property Arts, and Technology Clinic, CAL. W. Sch. L., https://www.cwsl.edu/experiential_learning/clinics/ new_media_rights.html (last visited Aug. 20, 2024) (enabling trimester-based legal interns to represent the nonprofit New Media Rights' cases, involving contract drafting, IP analysis, and IP policy analysis); Internet & Intellectual Property Justice Clinic, Univ. S.F. Sch. L., https:// www.usfca.edu/law/engaged-learning/law-clinics#chapter=chapter-22517-Internet-and-Intellectual-Property-Justice-Clinic (last visited Aug. 20, 2024) (representing individuals and startups on patent, trademark, and copyright cases).

142 See UNIV. S. CAL. GOULD SCH. L., supra, note 141 (describing Clinic clients with copyright and trademark issues as "budding filmmakers, artists, game developers, entrepreneurs and nonprofits," many of whom are "minority-owned or women-owned business").

edu/experiential-learning/clinics/our-clinics/communications-technology-law-clinic-ipr/ (last visited Aug. 20, 2024) (representing matters that raise questions about how society will "harness [technology] to promote justice and equity" and conducting "technology-related advocacy to advance social justice" on behalf of "people of color, people with disabilities, children, and other underrepresented groups."); *Technology Law & Policy Center*, N.C. Cent. Univ. Sch. L., https://law.nccu.edu/academics/techlawcenter/ (last visited Aug. 20, 2024) (seeking to "facilitate meaningful technology-related policy discussions" that ensure emergent technologies and legal responses "do not result in the further marginalization of the African American Community and are used to create a more just society").

¹⁴⁴ See Communications & Technology Law Clinic, GEo. L., supra note 143.

cyberlaw-clinic/ (last visited Aug. 20, 2024) (describing the Clinic's "broad-based practice", including IP, privacy, online speech, and several other areas of practice); *Technology Law and Policy Clinic*, N.Y.U. Sch. L., https://www.law.nyu.edu/academics/clinics/technologylawandpolicy (last visited Aug. 20, 2024) (representing "individuals, nonprofits, and other public-interest clients in addressing cutting edge issues at the intersections of technology and free speech, privacy, surveillance, and transparency," with half of the students representing the American Civil Liberties Union's Speech, Privacy & Technology Project); *Samuelson Law, Technology & Public Policy Clinic*, Berkeley L., https://www.law.berkeley.edu/experiential/clinics/samuelson-law-technology-public-policy-clinic/our-work/ (last visited Aug. 20, 2024)

represent civil liberties and civil rights challenges to emergent technologies, but may be less explicitly committed to social justice issues when these areas overlap.¹⁴⁶

Notwithstanding these distinctions, tech clinics often describe their work as serving the "public interest," but they seem to lack a shared, explicit understanding of what this means in the context of their doctrinal teaching or fieldwork. According to one survey, most tech clinics do not choose fieldwork opportunities based on the fit between their social missions and that of the potential client or project. For 40 to 50% of surveyed clinics, it was "not at all important" if their clients represented a larger class, presented a unique question of law, or brought a larger policy issue to the forefront. This may make sense for the myriad IP-forward tech clinics, whose clients may be individual artists or small businesses in IP rights acquisition cases. For generalist tech clinics that characterize their work as serving the public interest, however, it is unclear whether their work systematically serves underrepresented clients, with students working directly with harmed communities. The standard of the public interest of the standard of the public interest of the standard of the public interest.

(describing three main focus areas: "protecting civil liberties, promoting balanced intellectual property laws and access to information policies, and ensuring a fair criminal legal system."); Samuelson-Glushko Technology Law & Policy Clinic, Col. L., https://www.colorado.edu/law/academics/clinics/samuelson-glushko-technology-law-policy-clinic (last visited Aug. 20, 2024) (emphasizing student opportunities in tech policy advocacy before various administrative agencies on "telecommunications, intellectual property, privacy, accessibility, and other policy and regulatory matters with substantial technology dimensions"); Technology Law and Public Policy Clinic, Univ. Wash. Sch. L., https://www.law.uw.edu/academics/experiential-learning/clinics/technology-law (last visited Aug. 20, 2024) (focusing work on the "intersection of public policy and technology" through in-depth studies of current tech policy issues).

¹⁴⁶ See, e.g., N.Y.U. Sch. L., supra note 145 (committing around half of clinical students to ACLU matters and highlighting the "increasingly complex and critical questions for civil liberties and civil rights" raised by technological advances); Berkeley L., supra note 145 (emphasizing protecting civil liberties in the digital age).

147 See, e.g., N.Y.U. Sch. L., supra note 145 ("[The Clinic involves a mixture of fieldwork and seminar discussion ranging from technology law and policy to the ethical challenges of lawyering in the public interest"); Intellectual Property, Arts, and Technology Clinic, UCI L., https://www.law.uci.edu/academics/real-life-learning/clinics/ipat.html (last visited Aug. 20, 2024) ("Clinic students gain important legal skills while examining the role of the public interest in intellectual property and technology law"); USC Gould Sch. L., supra note 141 (quoting client testimonial describing clinic's "efforts in public interest advocacy").

¹⁴⁸ *Cf.* Levendowski, *supra* note 27 (discussing teaching legal doctrine to highlight social justice issues in IP and information policy, especially when clinical fieldwork may not raise them directly).

¹⁴⁹ Cynthia L. Dahl & Victoria F. Phillips, *Innovation and Tradition: A Survey of Intellectual Property and Technology Legal Clinics*, 25 CLIN. L. Rev. 95, 131 (2018) ("[F]or the majority of clinics, furthering their own missions by choosing clients with social missions is only 'slightly' or 'moderately' compelling.").

¹⁵⁰ *Id*.

¹⁵¹ *Id.* at 132. While rare, generalist tech clinics do provide fieldwork opportunities focused on providing direct representation for underrepresented communities within a larger suite of projects and clients. *See* HARV. L. Sch., *supra* note 145 (offering "*pro bono* legal services at the intersection of technology and social justice"); KENDRA ALBERT, kendraalbert.

In generalist tech clinics committed to the public interest, clients are often sophisticated actors or nonprofits with expertise in tech law¹⁵² or other relevant areas. 153 who serve as middlemen for clinical students to engage indirectly with the communities these organizations serve. 154 More often than not, this gap influences the types of work product and case outcomes students produce during their clinical experiences, namely filings in strategic litigation cases, public comment drafts, or strategic counseling for sophisticated clients based on state and/or federal legal research. 155 Because direct input from those harmed by carceral tech rarely pass through the nonprofit or expert-client filter, students are limited to advocating "in theoreticals about the disproportionate impact[s]" on marginalized communities. 156 Their fieldwork experiences tend to suffer the same representation limitations as top-down, tech reformist posturing.¹⁵⁷ Worse, students may not develop culturally aware lawyering skills mandated by the ABA and core to clinics that represent low-income, immigrant, and/or other underserved clients. 158

com (last visited Aug. 20, 2024) (describing former Harvard Cyberlaw Clinic instructor's work representing sex worker art collective protesting digital gentrification).

152 See Technology Law & Policy Clinic, N.Y.U. L. ENGELBERG CTR., https://www.nyuengelberg.org/projects/technology-law-and-policy-clinic/ (gathering recent NYU Technology Law & Policy Clinic projects, including representing technology law expert nonprofits ACLU, EFF, and EPIC); Clinic Teams w/ Cathy O'Neil for HUD Comment re: Algorithmic Discrimination, Cyberlaw Clinic, https://clinic.cyber.harvard.edu/2019/10/21/clinic-teams-wcathy-oneil-for-hud-comment-re-algorithmic-discrimination/ (last visited Aug. 20, 2024) (describing public comment collaboration with data scientist and AI expert Cathy O'Neil); Cyberlaw Clinic Files Comment for CDT Urging the U.S. Dept. of Ed. to Protect LGBTQI+ Students from Discriminatory Tech, Cyberlaw Clinic, https://clinic.cyber.harvard.edu/2022/09/22/cyberlaw-clinic-files-comment-for-cdt-urging-the-u-s-dept-of-ed-to-protect-lgbtqi-students-from-discriminatory-tech/ (Sept. 22, 2022) (describing public comment submitted on behalf of the Center for Democracy and Technology).

153 See NAACP to the D.C. Circuit: Nobody Should Have to Pay to Read the Law, NYU ENGELBERG CTR., https://www.nyuengelberg.org/news/naacp-to-the-d-c-circuit-nobody-should-have-to-pay-to-read-the-law/ (Feb. 1, 2023) (representing racial justice organization NAACP); Protecting the Right of Public Access to Court Records and Stored Communications Act Warrant Materials, Berkeley L., https://www.law.berkeley.edu/case-project/rcfp-sca-warrant-materials/ (Apr. 22, 2024) (representing press' First Amendment rights organization Reporters Committee for Freedom of the Press).

¹⁵⁴ See Jennifer Ceema Samimi, Funding America's Nonprofits: The Nonprofit Industrial Complex's Hold on Social Justice, 1 COLUM. SOCIAL WORK REV. 17 (2010) (describing the Nonprofit Industrial Complex as a phenomenon that institutionalizes nonprofits by forcing them to professionalize operations and compromise on providing robust social services to secure government and foundation funding).

¹⁵⁵ Of course, this is in addition to practical considerations that may shape and/or limit final work products, including the amount of students enrolled in the clinic, the credit load, and the amount of time allotted (for example, semester vs. year-long).

- 156 HINTZ ET AL., supra note 136.
- 157 See supra Section I.B.
- 158 See Am. Bar Ass'n, ABA Standards and Rules of Procedure for Approval of Law Schools 2022–2023 18 (2022), https://www.americanbar.org/content/dam/aba/administrative/

II. Data Justice Readiness

Data-driven carceral technologies are increasing the scale, power, and violence of the technology industry alongside the scale, power, and violence of the carceral state. These technologies operate on a logic of social control, reducing people to dataflows and subjecting certain groups to ceaseless surveillance, separation, and containment. As government care and social services are outsourced to corporations, data-driven innovations turn structural inequities into potential market opportunities. The datafication of programs affecting structurally-marginalized communities unites tech companies' profit-seeking and the state's cost-saving priorities. Carceral tech thus deepen social, racial, and economic injustices as data injustices.

Many have written that law clinics have a special duty to promote justice. ¹⁵⁹ This Article argues that tech clinics are uniquely positioned to promote data justice by challenging the datafied status quo. Data justice centers the needs and voices of structurally-marginalized communities targeted by carceral tech. It is a means of redress for the ways that data has been weaponized against IBPOC, 2SLGBT+, and other communities to fortify oppressive systems that silence, harm, and weaken them. ¹⁶⁰ Data justice readiness is a pedagogical approach that aims to maximize student learning opportunities by treating tech law and policy issues as data justice issues fundamentally.

This Article focuses on client and project selection as one entry point into data justice readiness. By adopting a data justice vision, clinicians can help identify and select projects that stem from community needs, giving students direct exposure to data injustices and expanding their perspectives beyond narrow tech reformism. This can inspire a generation of advocates who are able to imagine new strategies and interventions to disrupt data power disparities.

Clinicians interested in adopting a data justice vision can learn from colleagues who are preparing future legal advocates to question oppressive systems and dismantle them. This Section uses various clinics' shared vision to abolish the prison industrial complex (PIC) as

legal_education_and_admissions_to_the_bar/standards/2022-2023/22-23-standard-ch3.pdf (requiring law schools to provide education on cross-cultural competency).

and Jane Aiken, Teaching and Doing: The Role of Law School Clinics in Enhancing Access to Justice, 73 Fordham L. Rev. 97 (2004); Frank S. Bloch and M.R.K. Prasad, Institutionalizing a Social Justice Mission for Clinical Legal Education: Cross-National Currents from India and the United States, 13 Clin. L. Rev. 165 (2006); Margaret M. Barry, A. Rachel Camp, Margaret Ellen Johnson, Catherine F. Klein, & Lisa V. Martin, Teaching Social Justice Lawyering: Systematically Including Community Legal Education in Law School Clinics, 18 Clin. L. Rev. 401 (2012).

¹⁶⁰ See Coalition of Communities of Color, Research & Data Justice, https://www.coalitioncommunitiescolor.org/-why-research-data-justice (last visited Aug. 8, 2024).

inspiration for a data justice vision rejecting carceral tech. Drawing from abolitionist lawyers, it situates data justice readiness in the tradition of movement lawyering, a form of critical lawyering that puts social movements in control of legal advocacy and reform decisions, and draws on scholarship highlighting the creative opportunities for student learning that attend clinical representation of movement actors. ¹⁶¹ By prioritizing communities most affected by and mobilized against carceral tech in project selection, tech clinics can better train future advocates to be data justice ready.

A. PIC Abolitionist Clinics Show How Vision Can Drive Pedagogy

Legal education can play a significant role in shifting law students' trajectories from their stated goals of working on behalf of the public good. 162 Law schools tend to reflect the power structures already enshrined in modern legal doctrines and precedents, helping to entrench the status quo of a society with staggering levels of wealth inequality and mass incarceration. 163 More often than not, they mold graduates to "serve political and economic elites" in a landscape where corporations are the default legal structure for economic production and their shareholders are its default beneficiaries. 164 Through both structure and

¹⁶¹ Scholars have used various terms to describe forms of representation and advocacy favoring mobilized and/or collective clients to pursue social justice aims, including political lawyering, rebellious lawyering, and community lawyering. For simplicity, I use critical lawyering as an umbrella term for these approaches. *See* Amna A. Akbar, Sameer Ashar & Jocelyn Simonson, *Movement Law*, 73 Stan. L. Rev. 821, 840 n. 68 (2021) (gathering sources).

162 See Duncan Kennedy, Legal Education and the Reproduction of Hierarchy, 32 J. Legal Educ. 591, 601 (1982) (describing how law schools tend to funnel students into corporate practice jobs in the hierarchy of the bar based on their standing in the hierarchy of schools); Rebecca C. Flanagan, Anthrogogy: Towards Inclusive Law School Learning, 19 Conn. Pub. Interest L.J. 93, 106–07 (2019) (discussing empirical research finding how law schools turn students from "justice-oriented" to "game-oriented" and cause several first-year students to abandon hope by the end of their 1L years). See Nicole Smith Futrell, The Practice and Pedagogy of Carceral Abolition in a Criminal Defense Clinic, 45 N.Y.U. Rev. L. Soc. Change 101, 125 (2021) ("For too long law schools have encouraged the education of lawyers in an ostensibly value-neutral way.").

¹⁶³ See Wealth Inequality in the United States, INEQUALITY.ORG, https://inequality.org/facts/wealth-inequality/ (last visited Aug. 20, 2024); United States Profile, Prison Pol'y INITIATIVE, https://www.prisonpolicy.org/profiles/US.html (last visited Aug. 20, 2024). See also Fran Quigley, Seizing the Disorienting Moment: Adult Learning Theory and the Teaching of Social Justice in Law School Clinics, 2 Clin. L. Rev. 37, 40 (1995) (describing lawyers' roles in crafting "taxation schemes, regulatory policies, government budgets, criminal laws, public benefit programs, election laws and constitutional rulings" that directly result in widespread oppression).

¹⁶⁴ Angela Harris, *Foreword: Racial Capitalism and Law, in Histories of Racial Capitalism vii, xi, xxii (Destin Jenkins & Justin Leroy eds., 2021); see also id.* at viii ("'Capitalism' doesn't exist in [law-and economic] fields. There are only markets and economic analysis, abstract systems obeying rules that are elegant, timeless, and inherently disconnected form matters of 'distribution.'").

substance, U.S. law schools are inherently political spaces that rarely make large-scale institutional and/or pedagogical changes to repair the harmful legacies of settler colonialism and slavery. ¹⁶⁵ In this environment, it is no surprise that several students lose their motivations to serve structurally-marginalized communities by 2L fall. ¹⁶⁶

Since their inception, clinics have served an important corrective function for the traditionally hierarchical and insufficiently critical law school experience. ¹⁶⁷ Clinicians often embrace specific and explicit visions of justice, committing their legal advocacy to serving the needs of communities overlooked and underserved by traditional legal practice. ¹⁶⁸ The eradication of systems of oppression is a core lawyering value that drives both their clinical teaching and dockets. ¹⁶⁹ As Deborah Archer notes, "[e]very clinical program makes a political decision in deciding which cases to take or not to take, as each decision has political

structural inequities as doctrine that are in fact socially determined, meanwhile limiting structural inequities as doctrine that are in fact socially determined, meanwhile limiting students' views of what kinds of societal change are (and are not) possible. *See* Sameer Ashar, Renee Hatcher, & John Whitlow, *Law Clinics and Racial Capitalism*, LPE PROJECT (Nov. 7, 2022), https://lpeproject.org/blog/law-clinics-and-racial-capitalism/ ("The basic 1L curriculum is steeped in our country's history of settler colonialism and slavery, and the law taught in the first year largely constitutes a legal infrastructure [of racial capitalism]"); Anne D. Gordon, *Cleaning Up Our Own Houses: Creating Anti-Racist Clinical Programs*, 29 CLIN. L. Rev. 49, 50 (2022). Scholars point to the law-and-economics approach in legal academy as a key factor. *See* Harris, *supra* note 164. An in-depth discussion of racial capitalism is beyond the scope of this Article. For more information, *see generally* Nancy Leong, *Racial Capitalism*, 126 Harr. L. Rev. 2152, 2161 (2013).

¹⁶⁶ Duncan Kennedy puts it best: "[l]aw schools are intensely political places, in spite of the fact that the modern law school seems intellectually unpretentious, barren of theoretical ambition or practical vision of what social life might be." Kennedy, *supra* note 162. *See also* Flanagan, *supra* note 162.

¹⁶⁷ See Gordon, supra note 165, at 55, 72–75 (listing several reasons why clinics "are necessary (and ideal) locus of change" to combat "policies and practices in law school [that] mirror the racial hierarchies of the outside world").

should include lessons of social justice. Clinical teachers should accept as part of their role the exposure of clinical students to experiences and reflective opportunities that will lead to social justice learning."); Wallace J. Mlyniec, Where to Begin? Training New Teachers in the Art of Clinical Pedagogy, 18 CLIN. L. REV. 101, 141 (2012) ("Confronting values that diminish the autonomy and power of disadvantaged groups in society is the stated goal of some clinics. It does not matter, however, whether social justice is a stated goal or not. These issues will arise."); Gordon, supra note 165, at 73 ("The founding goals of clinical legal education were to provide law students the opportunity to learn the skills necessary to practice law and provide quality legal services to the poor."); Stephen R. Miller, Field Notes from Starting a Law School Clinic, 20 CLIN. L. REV. 137, 145–46 (2013) (describing the necessity of finding a political identity).

¹⁶⁹ See Futrell, supra note 162, at 125; Gordon, supra note 165, at 73 ("While clinics engage in justice education in different ways and among different client populations, a common denominator for many clinics is a commitment to the difficult work of empowering subordinated people and/or promoting projects that challenge and change system norms.").

implications."¹⁷⁰ Clinics also hold great potential to nurture "new and evolving models of lawyering" that can fundamentally reshape public interest practice.¹⁷¹ Through explicit commitments to justice and innovative pedagogy, clinics help many students salvage their initial desires to practice law for the public good.

For many, commitment to a particular vision of justice is an essential feature of clinical practice that informs pedagogy and fieldwork alike, reflecting "the operating ethos of self-conscious law practice" which clinicians hope to model for their students.¹⁷² Adopting a critical lawyering vision, clinical legal scholars have demonstrated the fruitful collaborations that are possible through solidarity with justice movements organizing for large-scale social transformation.¹⁷³ One key area of injustice, and of movements organized for transformation, is the vast web of carceral institutions that disproportionately damage Indigenous, Black and brown communities.¹⁷⁴ One key vision of justice is the abolition of the prison industrial complex (PIC) that bolsters these institutions, and several clinicians find this vision increasingly helpful to drive their work.

A variety of clinicians from criminal defense, immigrant rights, and family regulation are embracing PIC abolition as a guiding principle both in the classroom and beyond it. Most recently following mass mobilizations against police brutality in the summer of 2020, several clinicians have turned their attention to the insights of abolitionist activists in challenging violent and oppressive systems. PIC abolition "presents a clear set of values" for clinics to integrate into both pedagogy

¹⁷⁰ Deborah N. Archer, *Political Lawyering for the 21st Century*, 96 Denv. L. Rev. 399, 413 (2019).

¹⁷¹ Id

¹⁷² Gary Bellow, *Steady Work: A Practitioner's Reflections on Political Lawyering*, 31 Harv. C.R.-C.L. L. Rev. 297, 301 (1996); see also Missy Risser-Lovings, *Designing an Emancipatory Clinic*, LPE Project (Nov. 15, 2022), https://lpeproject.org/blog/designing-an-emancipatory-clinic/ ("[L]aw school clinics can serve as important sites of critical pedagogy, helping students, partner organizations, and clients build towards an abolition democracy.").

¹⁷³ See Akbar, Ashar & Simonson, supra note 161 (describing examples and listing clinical scholarship); Sameer M. Ashar, Law Clinics and Collective Mobilization, 14 CLINICAL L. Rev. 355, 391–97 (providing examples of methods used to identify collective mobilization cases in New York and in Baltimore by the CUNY Immigrant & Refugee Rights Clinic in 2002–03).

¹⁷⁴ See Prison Pol'y Initiative, Native Incarceration in the U.S., https://www.prisonpolicy.org/profiles/native.html (last visited Aug. 8, 2024); MICHELLE ALEXANDER, THE NEW JIM CROW: MASS INCARCERATION IN THE AGE OF COLORBLINDNESS (2012); Jennifer M. Chacón, Overcriminalizing Immigration, 102 J. CRIM. L. & CRIMINOLOGY 613 (2012).

¹⁷⁵ Although clinical attention may be recent, PIC abolitionist frameworks, Black queer feminism, and critiques of racial capitalism have been useful reference points for racial justice organizing since at least the 2014 Ferguson and 2015 Baltimore uprisings in response to police killings of Michael Brown and Freddie Gray. See Marbre Stahly-Butts & Amna A. Akbar, Reforms for Radicals? An Abolitionist Framework, 68 U.C.L.A. L. Rev. 1544, 1548 (2022); Futrell, supra note 162, at 101 ("While abolitionist thought has long existed in organizing and

and fieldwork, countering law school's tendencies to leave students with the belief that the law is neutral and law schools are "instruments of oppression." It also invites clinicians to center movement actors and campaigns in clinic projects, exposing students to ground-up organizing needs and expanding their skillset to include political, as well as legal, strategy.

The PIC represents the criminalization of poverty and the replacement of anti-poverty programs with policing and incarceration, serving state and corporate interests. The As Ruth Wilson Gilmore notes, incarceration addresses social issues involving the poor, with police perpetuating inequality through "violence, surveillance, death, and debt. The PIC abolitionists challenge the belief that criminalization benefits the public and that police ensure safety, advocating instead for divesting resources from the criminal legal system to support overpoliced communities. They aim to reduce reliance on prisons and police, envisioning an "abolition democracy" rooted in racial and social justice, where all communities have access to housing, education, work, healthcare, and childcare. Abolitionist organizers promote "everyday abolition," encouraging community resilience and problem-solving without police intervention. This challenges the inevitability of police and calls for reforms addressing the broader political, economic, and social ecosystem.

PIC abolitionists have also had to articulate an alternative reform agenda against the inevitability of police and prisons for ensuring public safety. They challenge "the footprint, power, resources, and legitimacy" of carceral systems as the core problem. ¹⁸¹ They situate the PIC as "the stuff of structural violence," built on a legacy of slavery and continued through profound social, political, and economic inequities. ¹⁸² For them, reforms should seek to "contest and then to shrink the role of the police," freeing up resources currently spent on carceral institutions to better provide basic needs. ¹⁸³ Abolitionists seek to divert resources used to uphold the PIC to overpoliced communities directly, while other re-

non-legal academic spaces, law students and legal scholars are increasingly considering how a carceral abolitionist perspective can inform legal education and practice.").

¹⁷⁶ Gordon, *supra* note 165, at 55. *See also id.* at 73; Norrinda Brown Hayat, *Freedom Pedagogy: Toward Teaching Antiracist Clinics*, 28 CLIN. L. REV. 149, 155 (2021); Futrell, *supra* note 162, at 132 ("[A]n abolitionist ethic requires us to recognize and relinquish the familiarity, privilege, and security that oppressive systems bestow upon a select few.").

¹⁷⁷ See generally Angela Y. Davis, Are Prisons Obsolete? 84–104 (2003).

¹⁷⁸ Ruth Wilson Gilmore, Golden Gulag: Prisons, Surplus, Crisis and Opposition in Globalizing California 229 (1st ed. 2007).

¹⁷⁹ Risser-Lovings, *supra* note 172.

¹⁸⁰ Amna A. Akbar, An Abolitionist Horizon for (Police) Reform, 108 Cal. L. Rev. 1781, 1834 (2020).

¹⁸¹ Id. at 1788.

¹⁸² *Id*.

¹⁸³ *Id.* at 1787.

formers seek only to minimize police violence through further restrictions and funding.¹⁸⁴

There are two main forms of reform to the PIC: reformist reforms and non-reformist reforms. Reformist reforms legitimate the status quo by "failing to fundamentally challenge existing power relations." They are often used by the state to insulate existing power disparities. Reformist reforms are top-down and generated from "powerful insiders . . . that retain power within the insider class" but that cannot genuinely remedy carceral violence. They often narrowly focus on strengthening federal constitutional rights and expanding procedural safeguards to disincentivize police brutality. They

An abolitionist reform agenda is much broader. PIC abolitionists approach reforms by connecting who is and was historically harmed by police to who has control over policing. They aim to shift power, legitimacy, and resources away from the PIC to the communities trapped within it, increasing self-determination. Non-reformist reforms help unwind "the net of social control through criminalization. They are at odds with "capitalist needs, criteria, and rationales," and instead "advance[] a logic of 'what should be." In contexts with immense power differentials, non-reformist reforms are "bottom-up", redistributing power among communities who have been historically excluded from various forms of power.

Various thinkers have come up with ways to gauge whether a reform effort is non-reformist. 194 In general, they ask whether the reform

¹⁸⁴ *Id*.

¹⁸⁵ Stahly-Butts & Akbar, *supra* note 175, at 1551.

¹⁸⁶ *Id*.

¹⁸⁷ Id. at 1560.

¹⁸⁸ Akbar, *supra* note 180, at 1843.

¹⁸⁹ Jocelyn Simonson, *Police Reform Through a Power Lens*, 130 YALE L.J. 778, 788 (2021).

¹⁹⁰ See id. at 789 (describing this attention to power as working "at the meso-level of police reform: concentrating on governance and policymaking arrangements rather than outcomes or policies themselves.").

¹⁹¹ GILMORE, *supra* note 178, at 242.

¹⁹² Amna A. Akbar, Response, *Demands for a Democratic Political Economy*, 134 Harv. L. Rev. F. 90, 98, 101 (2020) (citing André Gorz, Strategy for Labor: A Radical Proposal (1967)).

¹⁹³ Stahly-Butts & Akbar, supra note 175, at 1560.

¹⁹⁴ See, e.g., Critical Resistance, Abolition is Liberation: Marbre Stahly-Butts & Rachel Herzig in Conversation with Cory Lira, YouTube (May 14, 2020), https://www.youtube.com/watch?v=dpYc-WnmMBs ("Does this reform shift any money or power at all? Does it acknowledge past harm? Does improve material conditions? And does it create space for experimentation as a result?"); Butts & Akbar, supra note 148, at 1552 (a non-reformist reform also "shrinks the system doing harm; . . . relies on modes of political, economic, and social organization that contradict prevailing [power] arrangements," and improves material conditions for directly impacted communities); The Evergreen State College Productions, Coming Together Speaker Series: Dean Spade, YouTube (May 4, 2018), https://www.youtube.com/watch?v=D1HtLMi-ELU (at 26:10) (asking whether the reform provides material

would: expand or shrink harmful systems; improve material conditions for impacted communities; and mobilize and/or strengthen forms of collective power and control—put differently, whether the reform is something that activists will have to "undo [] later." Would the suggested reform shift (1) money, (2) discretion, (3) or power over carceral systems away from powerful actors to communities most harmed by them?

Non-reformist reforms come directly from social movements, labor, and organized collectives of people most impacted by the PIC.¹⁹⁶ Abolitionist lawyers and clinicians use these communities' experiences and perspectives to inform legal and political advocacy, in line with movement lawyering principles.¹⁹⁷ Movement lawyering is an approach that aligns legal and political strategies with social movements to help advance their goals and build their power, often through advising movement campaigns.¹⁹⁸ Campaigns can have various goals, including policy reform, public awareness, and building a movement's organizational capacity.¹⁹⁹

Movement lawyers take their agenda directly from movement actors to inform advocacy efforts "inside or outside formal lawmaking spaces," prioritizing collective actions and empowering mobilized communities fighting against climate change, the PIC, wealth inequality, systemic oppression, and more. This decades-old approach is experiencing renewed popularity as intensifying, systemic injustices deepen the rift between the cautious progress of public interest law and the

relief, whether it mobilizes the most affected people for an ongoing struggle, and whether it legitimizes or expands a system the movement is trying to dismantle); *id.* at 34:10 (asking whether the reform will "expand the system that we're trying to dismantle," and if we will "have to undo this later.").

¹⁹⁵ The Evergreen State College Productions, *Coming Together Speaker Series: Dean Spade*, YouTube (May 4, 2018), https://www.youtube.com/watch?v=D1HtLMi-ELU (at 34:10).

¹⁹⁶ Akbar, Response, *supra* note 192, at 105.

¹⁹⁷ See Futrell, supra note 162, at 125 ("Lawyering that is rooted in more radical strategies, such as movement lawyering..., emphasizes the idea that those most impacted by the systems we are fighting against are in the best position to lead and set the representation goals.").

¹⁹⁸ Scott L. Cummings, *Movement Lawyering*, 27 U. ILL. L. Rev. 1645, 1646 (2017); Akbar, Ashar & Simonson, *supra* note 161, at 827.

¹⁹⁹ Akbar, Ashar & Simonson, *supra* note 161, at 827.

²⁰⁰ Susan D. Carle & Scott L. Cummings, *A Reflection on the Ethics of Movement Lawyering*, 31 Geo. J. Legal Ethics 447, 452 (2018).

²⁰¹ For further descriptions, *see* Cummings, *supra* note 198, at 1645–46 (providing examples of legal mobilization against antiterrorism policies following the September 11 attacks, restrictions on marriage equality for LGB individuals, bank bailouts during the subprime mortgage crisis, and more recently against police brutality and mass incarceration by the Movement for Black Lives beginning in 2015); Akbar, Ashar, & Simonson, *supra* note 161, at 824–25, 830–32 (providing further examples of social movements mobilizing against various contemporary crises, including fallout from the COVID-19 pandemic).

animated vigor of grassroots activism.²⁰² Especially where lawmakers have been too slow to regulate harmful industries, leaving judges to adjudicate complex, consequential issues, movement lawyering offers an alternative path for lawyers hoping to promote justice by furthering outcomes aligned with ground-up democracy and collective action—without depending on individualized client goals and the whims of judicial decision-making through impact litigation alone.²⁰³ When a social movement is nascent or weakly organized, however, movement lawyers fall back on more traditional legal advocacy tools to raise issue-specific consciousness and connect that awareness to movement-building activities.²⁰⁴

Along with representing mobilized clients, another key feature of movement lawyering is the use of integrated advocacy. Movement lawyers consider all available strategies and use a variety of them, together or apart, linearly or concurrently, to inform advocacy that empowers their collectivist clients. ²⁰⁵ In this context, legal skills cover a broad swath of competencies that include traditional skills, like written and oral advocacy in litigation, as well as community education, media outreach, advising activists, crafting policy positions and advocating for policy reform, and counseling movement actors on legal strategies they can use to influence policymakers.²⁰⁶ It essentially "reframes" what lawyering entails from a "narrow lens of technical legal skill" to the "broader art of persuasion."²⁰⁷ This requires creative and strategic thinking skills to pull a wide variety of potential actions into an overarching strategy that is most likely to bring a movement-client's demands to life. 208 While more traditional legal representations also require some amount of strategic thinking, hallowed mechanisms like precedent and professional training tend to "preserve stability" and predictability in legal outcomes. In contrast, movement lawyering pushes lawyers to think outside the litigation box, placing legal strategy as defined by lawyers in service to a broader political strategy defined by the movement.²⁰⁹

²⁰² See Akbar, Ashar, & Simonson, *supra* note 161, at 825 ("This particular moment of political, economic, and social crisis demands that more of us consider how to work alongside social movements"); Cummings, *supra* note 198, at 1646. See also Carle & Cummings, *supra* note 200, at 452–59 (comparing movement lawyering and public interest lawyering in the 1970s).

²⁰³ Akbar, Ashar & Simonson, *supra* note 161, at 827 (noting that social movement clients often challenge existing authorities through "action that occurs outside of the domain of formally-sanctioned lawmaking or dispute resolution").

²⁰⁴ See Cummings, supra note 198, at 1694–95 (describing New York Civil Liberties Union's litigation and movement building opposing solitary confinement).

²⁰⁵ *Id.* at 1653.

²⁰⁶ *Id.* at 1691.

²⁰⁷ Id. at 1703.

 $^{^{208}}$ Id. at 1704 (listing several movement tactics).

 $^{^{209}}$ *Id.* at 1695.

Several clinicians working with overpoliced and criminalized communities have adopted a PIC abolition vision in their pedagogy, encouraging students to use integrated advocacy to push for movement-driven reforms in criminal defense, immigrant rights, and family regulation contexts. This vision allows students in criminal defense clinics to critically analyze and challenge our criminal legal institutions.²¹⁰ Similarly, in immigrant rights clinics, adopting this vision shifts focus from procedural reforms to challenging structural injustices like detention and deportation.²¹¹ And clinics challenging family policing integrate PIC abolition to intervene as early as possible for their clients, ideally minimizing the chances of state encroachment and violence.²¹² By fostering this critical perspective, students can reassess their roles as lawyers within oppressive systems, promoting social consciousness and responsibility.²¹³ Clinicians who prioritize non-reformist outcomes help shrink the carceral state's effect on the communities they represent and show students that transformative change is possible, even in the most entrenched and violent of legal systems.

A PIC abolitionist vision is beneficial for clinicians and their students, offering a foundation to reflect on the law's limitations and its role in legitimizing harmful systems. By embracing PIC abolition, clinics challenge the assumption that oppressive institutions are immutable parts of society. ²¹⁴ Tech clinics can draw inspiration from this approach to challenge the relentless pursuit of data-driven innovation that so often results in carceral tech. As state and corporate entities amass immense data power through these innovations, tech clinicians risk perpetuating this status quo without a clear, critical vision guiding their work.

²¹⁰ Futrell, *supra* note 162, at 107.

²¹¹ See, e.g., Sherman-Stokes, supra note 78; Laila L. Hlass, Lawyering from a Deportation Abolition Ethic, 110 Cal. L. Rev. 1597 (2022); Alina Das, Immigration Detention and Dissent: The Role of the First Amendment on the Road to Abolition, 56 Ga. L. Rev. 1433 (2022); Angélica Cházaro, The End of Deportation, 69 UCLA L. Rev. 1040 (2021).

²¹² See Wendy A. Bach, Prosecuting Poverty, Criminalizing Care (2022); Dorothy Roberts, Torn Apart: How the Child Welfare System Destroys Black Families—And How Abolition Can Build a Safer World (2022); Dorothy Roberts, Why Abolition (2023), https://doi.org/10.1111/fcre.12712; Dorothy Roberts, Building a World Without Family Policing, LPE Project (July 17, 2023), https://lpeproject.org/blog/building-a-world-without-family-policing/ ("Family policing, like criminal law enforcement and prisons, is designed to serve the US racial capitalist power structure ... by regulating and disrupting the most disenfranchised populations in place of meeting human needs."); Julia Hernandez & Tarek Z. Ismail, Leveraging Law School Clinics Against Family Policing, LPE Project (Nov. 8, 2022), https://lpeproject.org/blog/leveraging-law-school-clinics-against-family-policing/ (describing CUNY's Family Defense Program practicum approach of "radical early defense," involving representing clients at the earliest possible moment to restrict or eliminate the state's ability to harm them).

²¹³ Futrell, *supra* note 162, at 107.

²¹⁴ *Id.* at 109.

B. A Data Justice Vision

Data justice links data-driven technologies to a social justice agenda, focusing on the power dynamics inherent in our data-centric lives. The concept highlights how datafication exacerbates existing inequities through pervasive data pipelines, shaping social relations and influencing what information is made valuable and actionable. Data justice specifically examines the impacts of this process on structurally-marginalized communities, addressing how they become reduced, (mis) represented, and (mis) treated in data production. It situates data within broader social conditions, questioning how social justice evolves amidst datafication and advocating for more equitable practices in a data-driven society.

Advancing a data justice vision dissolves the notion that data and surveillance issues are niche specialties, transforming them into core features of social justice. ²¹⁸ By integrating data critique into a broader social justice agenda, data justice decenters the traditional, critical focus on specific technologies and how they function. Instead, it situates new technologies within broader systems of oppression and gives those with a history of struggle against these systems a special say in what constitutes data harms. ²¹⁹

Data justice moves away from a critical narrative on mass surveillance or mass data collection that implies everyone is equally impacted by highlighting how datafication harms are not experienced equally.²²⁰ Through a systemic lens, it opens up a narrative space to inspire collective mobilization on data harms.²²¹ To put a data justice vision into action, advocates must prioritize collaborations and coalitions that unite tech-focused expertise with social justice movements to raise data consciousness, build solidarity, and support mobilization to resist corporate data power.²²²

²¹⁵ See Taylor, supra note 57.

²¹⁶ See supra Section I.A.

²¹⁷ See Angela Calabrese Barton, Day Greenberg, Chandler Turner, Devon Ritter, Melissa Perez, Tammy Tasker, Denise Jones, Leslie Rupert Herrenkohl & Elizabeth A. Davis, Youth Critical Data Practices in the COVID-19 Multipandemic, 7 AREA OPEN (2021) (noting how specific communities are "made (in)visible, (mis)represented, and (mis)treated").

²¹⁸ See Lina Dencik, Arne Hintz & Jonathan Cable, *Towards Data Justice? The Ambiguity of Anti-Surveillance Resistance in Political Activism*, 3 Big Data & Soc'y (2016) (spanning social, political, cultural, ecological, and economic justice).

 ²¹⁹ Lina Dencik & Javier Sanchez-Monedero, *Data Justice*, 11 INTERNET POL'Y Rev. 1, 9 (2022).
 ²²⁰ Id.

²²¹ Id.

²²² See HINTZ ET AL., supra note 136, at 165 (highlighting emerging coalitions between "digital rights networks and refugee networks, between social security workers, local activists and unions, between teachers, parent groups, anti-racism groups and migrants' rights organizations").

To train the next generations of advocates, tech clinics should embrace a data justice vision informed by direct representation of clients with a nexus to mobilized groups fighting carceral tech, just as other clinics serving overpoliced and surveilled clients embrace a PIC abolitionist vision to inform their advocacy.²²³ This vision will help tech clinics deprioritize technocratic perspectives on making carceral tech fairer, more transparent, and more accurate. Clinics can move towards a deeper structural understanding of how these technologies "fit into the political system" characterized by mass incarceration, deportation, detention, poverty, and chronic health and financial insecurity.²²⁴ A data justice vision pushes clinicians to take a more expansive view of the impact of tech law and policy advocacy by focusing on the underlying power arrangements that underrepresent harmed communities in tech reform conversations.²²⁵ By amplifying their perspectives, tech clinics can help build countervailing power for those who currently have no say over what technologies are built, for which purposes, and how they are deployed in their own neighborhoods.²²⁶

Tech clinics can become more effective partners in building people data power to resist stopgap caracal tech by centering the perspectives of impacted communities.²²⁷ Through fieldwork opportunities that bring them in direct conversation with these communities, clinicians can expand students' learning opportunities and ensure students become data justice ready.

C. Data Justice Readiness

In her seminal piece, Jane Aiken argues that clinics must not only prepare students to practice law but to be justice ready as well.²²⁸ A student who is justice ready is both aware of and dedicated to fighting injustice, and they becomes so when their clinical instructors commit to revealing injustices with their client communities, operant legal systems, and broader society.²²⁹ Aiken urges the clinical community to create

²²³ See supra Section II.A.

²²⁴ KATZ, *supra* note 116, at 132.

²²⁵ See Howard Erlanger, Bryant Garth, Jane Larson, Elizabeth Mertz, Victoria Nourse & David Wilkins, *Is It Time for a New Legal Realism*?, 2005 Wis. L. Rev. 335, 339–40 (2005).

²²⁶ See Mari J. Matsuda, When the First Quail Calls: Multiple Consciousness as Jurisprudential Method, 11 Women's Rights L. Rep. 7 (1989).

²²⁷ See Brown Hayat, supra note 174, at 162 ("[I]f you are directing an immigration clinic, cite immigrants. If you are directing a criminal clinic, cite incarcerated people. If you are directing a clinic that represents indigenous people, consider populating your syllabus with the intellectual production of Native peoples.").

²²⁸ Aiken, *supra* note 26.

²²⁹ Id. at 234.

strategies that ensure future lawyers appreciate justice, noting that the "key to transformation is critical reflection."²³⁰

To facilitate critical reflection, clinicians must choose clients and projects that are likely to have an emotional impact on students.²³¹ A similar insight comes from clinicians serving poor, disabled, elderly, and otherwise marginalized clients, whose students regularly question their prior notions of social justice through their clients' interactions with deeply unjust legal systems.²³² The well-known "disorienting moment" follows when a student's prior notions of social reality fail to explain the clients' situation, inviting a moment of rupture for the student to critically reflect on the dominant societal norms she had internalized.²³³ Crucially, clinicians must design learning opportunities that will likely lead to disorienting moments.²³⁴ Many students are so moved by these emotional, transformative moments that they change their career goals, their perception of what lawyers owe to marginalized communities, and/ or their attitudes on the state's role in ensuring the social and economic security of all people.²³⁵

While data justice readiness can be partially achieved through reflections on critical reading materials in clinics with a seminar component, clinicians can increase the emotional impact of data injustices through fieldwork involving carceral tech.²³⁶ By selecting clients and projects where students have more direct contact with communities affected by and/or mobilized against carceral tech, clinicians can supplement seminar discussions with real-life examples of how data-driven technologies tend to worsen unjust social conditions rather than resolve them. Students will gain first-hand knowledge of how the technology ecosystem is more often disempowering than liberatory by seeing how

²³⁰ Id. at 237, 239.

²³¹ Id. at 242.

²³² See Quigley, supra note 163.

²³³ *Id.* at 46–47, 51–52.

²³⁴ *Id.* at 51.

²³⁵ Id. at 56.

²³⁶ Building on Professor Aiken's insights, Amanda Levendowski offers tech clinicians a roadmap for preparing students to be justice ready by teaching doctrine to supplement casework for clients, especially useful when cases and projects may be limited or too variable to provide consistent opportunities for students to develop their justice orientation. Levendowski, *supra* note 27. She challenges the common misconception held by students that these areas of law do not implicate issues of social justice, highlighting several intellectual property and information policy issues that push students to reflect on and ultimately transform currently unjust legal regimes. *Id.* at 111–12. In offering a doctrinal channel for teaching justice readiness, however, she acknowledges that not all casework opportunities necessarily raise issues of justice in tech clinics. *Id.* at 112 n.6. While this Article focuses solely on client and project selection, clinicians can read both pieces together for a more comprehensive data justice pedagogy.

their clients struggle against social, racial, and economic oppression amplified by datafication.

When students work on data justice issues through their fieldwork, they also expand their skillset to include integrated advocacy. Representing groups fighting carceral tech requires students to consider how best to support their actions, above and beyond traditional litigation skills like brief writing and oral advocacy. While their clients may choose to bring or join active litigation, more often these types of projects will push students to advocate for specific, non-reformist policies by researching and drafting proposals, providing written legal opinions to support clients' positions, and counseling the client on different negotiation tactics in meetings with policymakers or private actors. They will learn when and how to engage the media, increase public awareness, and develop community education materials. Beyond supporting actions and campaigns, students will also learn the importance of coalition-building skills, including navigating substantive disagreements among different movement actors.

Giving students this knowledge through direct experience is a powerful way to encourage data justice readiness, regardless of whether students go on to practice tech law. As tech companies enmesh their product solutions in more diverse industries and markets, being data justice ready is essential for all future lawyers and advocates. So, how can tech clinics choose clients and projects to cultivate data justice readiness?

III. Using Data Justice Readiness to Guide Client and Project Selection

As public concerns over data-driven technologies grow, tech clinics are starting to include more data justice issues in their clinical teaching.²³⁷ Beyond seminar discussions, however, clinicians are uniquely positioned to adopt an explicit data justice vision to guide their pedagogy and to select prospective clients and projects in alignment with that vision.²³⁸

²³⁷ See, e.g., Luona Lin, A Quarter of U.S. Teachers Say AI Tools Do More Harm than Good in K-12 Education, Pew Rsch. Ctr. (May 15, 2024), https://www.pewresearch.org/short-reads/2024/05/15/a-quarter-of-u-s-teachers-say-ai-tools-do-more-harm-than-good-in-k-12-education/; Michelle Faverio & Alec Tyson, What the Data Says About Americans' Views of Artificial Intelligence, Pew Rsch. Ctr. (Nov. 21, 2023), https://www.pewresearch.org/short-reads/2023/11/21/what-the-data-says-about-americans-views-of-artificial-intelligence/(finding over 50% are more concerned than excited); Michelle Faverio, Key Findings About Americans and Data Privacy, Pew Rsch. Ctr. (Oct. 18, 2023), https://www.pewresearch.org/short-reads/2023/10/18/key-findings-about-americans-and-data-privacy/ (finding over 70% are concerned about personal data collection).

²³⁸ To the author's knowledge, the only programs dedicated explicitly to representing data justice issues are Georgetown Law's Communications & Technology Law Clinic and Intellectual Property and Information Policy Clinic.

Clinicians who adopt an explicit data justice vision will have a principled, transparent guide for picking matters that prioritize issues at the intersection of data-driven technologies and social, racial, and economic justice. Like most clinicians, tech clinicians often have a gut feeling about how much of the clinic's time and resources should be allocated to advocating for a particular group or cause, and who the clinic views as optimal "winners and losers" on a particular tech law issue.²³⁹ These considerations, both practical and substantive, bear out in their choices of which clients to represent on which types of cases. But when a clinic lacks an explicit vision of justice or theory of change, selection decisions may overvalue clients with a certain level of prestige, expertise, and/or organizational consistency, even when those clients may not be in solidarity with communities harmed by carceral tech. At best, students may represent civil society groups or coalition members that routinely advocate on behalf of these communities but could be more representative of community needs themselves.²⁴⁰ These projects may also lack opportunities for integrated advocacy skill-building.²⁴¹ As a result, students may reproduce traditional legal outputs parroting incremental reform suggestions that do not go as far as they could to resist carceral tech.

This Article argues that tech clinics should instead be explicit about their priorities and consider adopting a data justice vision to guide their pedagogy. Data justice involves shifting power back to mobilized communities currently harmed by carceral tech, which are technologies of social control that compound structural inequities. Data justice readiness requires clinicians to prioritize fieldwork opportunities that increase students' exposure to these communities' experiences, perspectives, and needs, especially where they advocate against carceral tech.

This Section walks interested clinicians through the process of selecting clients and projects aligned with a data justice vision. During this process, tech clinics should focus on the intersection of mobilized client goals, broader movement goals, and student learning opportunities. The assessment should ensure a close fit between these three variables, emphasizing how this client or project would further a data justice vision. This Section draws from the Appendix, which provides a draft clinical mission and intake form. The following discussion further describes each step of the intake form and highlights key questions for clinicians to consider. It then applies the framework to three prospective projects to demonstrate how these questions can guide intake decisions in real scenarios.

²³⁹ Miller, *supra* note 168, at 146.

²⁴⁰ See supra I.B.

²⁴¹ See id.

Ideally, the framework will be applied proactively in assessing potential clients and projects, but clinicians can also apply it retroactively to past projects to help measure the extent to which their fieldwork opportunities are already aligned with a data justice vision. There are also several practical considerations involved in client and project selection that are not captured by this framework, including the scope of the project, whether one or two semesters is enough time, and whether students will be interested. For the sake of simplicity, this Section assumes away any practical hurdles to focus attention solely on the data justice framework.

A. The Data Justice Framework

First, prioritize projects involving mobilized clients. Such clients can be mobilized in or have a nexus with any social justice movement organized to confront oppressive, unjust, and undemocratic systems including racial inequity, economic exploitation, and cultural exclusion. During selection, the client should be able to articulate which movement(s) they are involved in, and give examples of current or past work advancing movement goals. Ideally, prospective clients will also serve a structurally-marginalized community, like IBPOC or other minority communities, poor and economically disinvested communities, 2SLGBT+ communities, immigrants, People with Disabilities, laborers, and more.

Clients may already be engaged in activism against a carceral tech or program raising data justice issues, especially when their communities are directly harmed. Such tech or programs can include biometric surveillance technologies (facial recognition, emotion/affect recognition, automated gender recognition, DNA/genetic information tracking); predictive policing programs and databases; private-public partnerships; e-carceration; automated license plate readers; drones; smart border technologies; gig work and work-related surveillance; education surveillance; and public benefits technologies (including automated fraud detection programs used in housing, childcare, and healthcare systems).

These nascent movements serve as a necessary counterweight to the datafied status quo that has funneled immense power into the boardrooms of technology companies and their government customers. They attempt to shift that power back to the people to realize a participatory vision that Hannah Bloch-Wehba calls "the democratic vision of algorithmic governance."²⁴² By applying a power lens to the technology

²⁴² Bloch-Wehba, *supra* note 75, at 73.

ecosystem, these movements fight to build a contestatory democracy.²⁴³ Through mobilization and boots-on-the-ground activism, the goal is to "introduce a bit of friction" between the technology ecosystem of today and what could be possible in the future.²⁴⁴ For example, activists from the Stop LAPD Spying Coalition, a grassroots community group building local people power to abolish police surveillance, articulate their cause simply: "[W]e oppose government and corporate surveillance of all kinds, we will never support it, and we will not work with anyone who does."245 Meanwhile for CTRN, a grassroots movement resisting carceral technologies, their cause is to organize against "carceral institutions, actors, and systems—not surveillance" because they are skeptical of the ways that privacy advocates have been ineffective in stopping surveillance practices by focusing on their "creepiness."²⁴⁶ CTRN sees their work as opposing "a category of violence—legally sanctioned violence by the carceral state—that has a long history of radicalized surveillance, and a short history of digital surveillance."247 Carceral tech are inherently violent, so their movement's goal must go beyond making them less invasive.²⁴⁸ Although they may articulate their causes differently, these and several other emerging resistance groups understand that data justice requires organizing against the conditions that make carceral tech possible.²⁴⁹

Alternatively, the client may be part of a social movement whose main cause(s) are impacted by data-driven technologies, regardless of whether the client and/or impacted community members are aware of that tech or impact. As data justice is a relatively new concept, clinicians need not solely focus on existing activism in this space, or worse, wait for explicit data justice movements to form. Data power has deepened preexisting inequities that affect already-mobilized communities, including overpoliced and criminalized communities, immigrants and undocumented people, poor people, queer and trans people, sex workers, laborers and gig workers, and many more. Tech clinicians can prioritize matters representing social, economic, and racial justice movement actors as they grapple with carceral tech affecting their communities—including those that may impede effective organizing in the first place.

²⁴³ Simonson, *supra* note 189, at 787. *See also* Bloch-Wehba, *supra* note 75, at 75 (giving them the power to determine "whether, how, and when we ought to be governed by technology").

²⁴⁴ Abolishing Carceral Technologies, supra note 83.

²⁴⁵ Lopez, Bush, Khan & Montenegro, *supra* note 60.

²⁴⁶ Abolishing Carceral Technologies, supra note 83.

²⁴⁷ *Id*.

²⁴⁸ Id.

²⁴⁹ *Id*.

Clinics can help inform a variety of movement actors and their communities on data power and resisting carceral tech, raising data consciousness of the ways that data-driven technologies may be causing harm without assuming that people already have this knowledge. Students will be able to develop a deep understanding of the gaps between data consciousness and social justice consciousness within certain movements, ideating new and creative campaigns that use community members' lived experiences of injustice as an entry point into tech policy advocacy from the bottom-up. These types of projects also invite cross-clinical collaborations, as other clinics often have deep connections to local communities experiencing social precarity and may be better positioned to help tech clinics analyze the effects of carceral tech on these communities.

Second, prioritize projects that support non-reformist tech reform goals. A data justice vision includes shrinking the tech industry's unwieldy data power by enhancing people power in areas that carceral tech are used in place of collective care. Practically, that means the intended outcomes of a clinic project will help remove a technology from a harmed community altogether, like the bans on police use of facial recognition technology that spread throughout the country because of organized resistance.²⁵⁰

Social movements often advocate for a very different vision of tech reform than those embraced by academics, experts, and policymakers. While experts tend to ask incidental questions that accept the inevitability of data-driven products, data justice activists tend to ask foundational, structural questions that challenge it. They reject "bureaucratic oversight, legal accountability, and electoral safeguards" as the main ways to curtail carceral tech and embrace direct resistance techniques like walkouts and protests instead. ²⁵¹ They organize around data politics, asking how and why society has come to rely on private technologies to address complex social issues in the first place. ²⁵² By fighting to limit or prohibit the use of certain technologies by the state in low-rights, highrisk contexts, they naturally oppose common technocratic policy suggestions. For example, Stop LAPD Spying produced a report on the Los Angeles Police Department's use of predictive policing technologies that contained reforms inspired by directly impacted people. ²⁵³ Those

²⁵⁰ See Tate Ryan-Mosley, *The Movement to Limit Face Recognition Tech Might Finally Get a Win*, MIT Tech. Rev. (July 20, 2023), https://www.technologyreview.com/2023/07/20/1076539/face-recognition-massachusetts-test-police/.

²⁵¹ Bloch-Wehba, *supra* note 75, at 89.

²⁵² See Simonson, supra note 189, at 809.

²⁵³ See Before the Bullet Hits the Body: Dismantling Predictive Policing in Los Angeles, Stop LAPD Spying Coalition (2018), https://stoplapdspying.org/wp-content/uploads/2018/05/Before-the-Bullet-Hits-the-Body-May-8-2018.pdf.

responses differed starkly from reformist calls for "more interdisciplinary academic expertise, new public-private partnerships, or increased federal oversight."²⁵⁴ Those surveyed instead sought more investments directly into their communities, an outcome that changing a predictive policing algorithm's threshold to make it more "fair" or less "biased" cannot achieve.²⁵⁵

These movements create a clear dichotomy between reformist tech reforms that prioritize making tweaks to carceral tech and non-reformist tech reforms that challenge the underlying conditions for their existence. The latter reforms target the conditions that enable carceral tech to be profitable and popular forms of social control—often advocating for their removal and rejection—while the former leave those conditions under-investigated and unchallenged.²⁵⁶

As with PIC reform, there is a shared danger that the conventional tech reform agenda is very far removed from movement voices, instead inviting further investments into the tech industry, and building its power, legitimacy, and resources.²⁵⁷ Non-reformist tech reforms would instead shift power, legitimacy, and resources away from the tech industry and state actors to those currently affected by carceral tech. The data justice-aligned tech clinic should assess whether a prospective project's outcome is non-reformist, asking whether it works to shift (1) money, (2) discretion, (3) or power over the carceral tech or program to affected communities and away from industry and state actors.

- (1) For shifting money, clinicians should ask: How does the project's outcome help redistribute funding and resources to targeted communities? And how does it improve the community's material conditions?
- (2) For shifting discretion, clinicians should ask: How does it move authority from elite/specialist voices to the most marginalized members affected by the technology, program, or policy at issue? How does it empower community members to understand, redesign, and/or refuse the technology *before it is deployed*? And how does it create space for community-led experimentation with the technology, program, or policy as a result?
- (3) For shifting power, clinicians should ask: How does it reduce the capacity for companies and/or state actors to target, classify,

²⁵⁴ KATZ, *supra* note 116, at 146.

²⁵⁵ *Id.* (citing Before The Bullet Hits The Body, *supra* note 253).

²⁵⁶ See Malkia Devich-Cyril, *Targeted Surveillance, Civil Rights, and the Fight for Democracy*, MediaJustice (Oct. 13, 2015), https://mediajustice.org/news/targeted-surveillance-civil-rights-and-the-fight-for-democracy/ ("It's time to revolt and reject the use of technology to uphold the caste system in this country.").

²⁵⁷ See supra Section I.B.

coerce, punish, and/or control structurally-marginalized communities, including people of color, women, queer and trans* folks, immigrants, poor people, people with disabilities, unhoused people, incarcerated or formerly incarcerated people, sex workers, and others? How does it reduce the scale of the technology's effect on structurally-marginalized communities? And how does it reduce the government's reliance on algorithmic violence?

These criteria, borrowed from various PIC abolitionists, emphasize the importance of making space for directly impacted people to control the regulation and oversight of carceral tech in their communities. Tech clinics can and should be an active partner in their struggle, supporting non-reformist tech reforms that disrupt the status quo. Clinics can prioritize projects whose outcomes align with such reforms, helping produce a more imaginative, transformative policy agenda centering the voices of mobilized clients in determining the future flow of data power away from industry and government and towards the disempowered.

Third, prioritize projects that allow students to practice integrated advocacy skills. To maximize student learning opportunities, tech clinics should gauge the likelihood that students will need to use strategic and persuasive skills to further the client and movement's goals. Beyond traditional litigation and policy advocacy skills, these also include: supporting organizing action by counseling the client on the risks and benefits of different kinds of political actions, raising public awareness through opinion pieces, creating community education resources on legal strategies and related project findings, drafting administrative or other strategic materials to advance the client's advocacy and outreach, and helping the client with coalition-building needs by facilitating meetings among relevant stakeholders. An additional benefit is if a prospective project invites cross-clinic collaboration opportunities, allowing students to coordinate their advocacy efforts with justice-oriented clinics in other substantive areas like environmental law, immigration, criminal defense, family regulation, poverty law, and labor.

B. Potential Obstacles for the Data Justice Tech Clinic

While there are numerous new skills that students can gain from these types of projects, there are also a few obstacles that may arise for tech clinicians interested in adopting a data justice framework.

First, they may not have the necessary skills, knowledge, and cultural competencies to select and supervise data justice projects. This is a productive obstacle that encourages tech clinicians to reflect on their own positionality within privileged, technocratic institutions like law

schools vis-à-vis the local communities they are situated within. Not all clinicians are well-positioned to adopt this framework, but some are, and many more can easily become so.

Second, assuming they are sufficiently culturally competent, tech clinicians may be used to an ad hoc client selection process where former colleagues, collaborators, and other experts from their practice days send them potential projects. This is an obstacle because it requires clinicians to step away from the comfortable flow of projects from often prestigious, well-regarded clients to instead trace potential projects from within social movements that clinicians may not have prior connections with. This can also be a positive challenge, though, because it encourages tech clinicians to invest their time and energy in developing critical consciousness, attending political actions and local movement meetings both to learn about community issues and ideate potential fieldwork opportunities. This also encourages tech clinicians to follow the work of other clinicians focusing on community lawyering, movement lawyering, and other social justice issues, to see if there are potential synergies where data-driven technologies are involved.

Finally, there may be institutional obstacles for clinics embracing a data justice vision explicitly. Institutional stakeholders may not associate technology law with social justice and may see this repositioning as threatening to the appeal of the law school's tech offerings externally, especially in states where social justice issues are deprioritized in higher education. While unfortunate, this obstacle may be harder to overcome and require organizing support from funders and potential clients before achieving leadership buy in. Ultimately, clinicians may choose to balance their traditional approaches to project selection with the data justice approach, ensuring a mixture of projects in which data justice issues are there but do not dominate students' fieldwork experiences.

C. Applying the Data Justice Framework

This section applies the intake framework to three potential projects. The first two projects were completed by student advocates at New York University School of Law's Technology Law and Policy Clinic in the 2022–2023 academic year.²⁵⁸ The last project is a hypothetical inspired by ongoing advocacy by direct care workers and their clients against electronic surveillance. All three projects involve working with movements but vary in how the data justice framework applies. The first

²⁵⁸ Examples used with permission. The Author directly supervised the first two projects as a Supervising Attorney with the Clinic. A large caveat is that we did not undertake the following representations after explicitly adopting a data justice vision and committing to representing mobilized clients.

project is least likely to pass muster, the second project could pass, and the last project passes easily.

1. Least Likely: Cyber Civil Rights Initiative

The first project represents two law professors involved with an advocacy group called the Cyber Civil Rights Initiative (CCRI).²⁵⁹ CCRI envisions a world "in which law, policy, and technology align to ensure the protection of civil rights and civil liberties for all," and more specifically supports legislation, policy, and lawsuits challenging image-based sexual abuse (IBSA) online. To that end, the organization is comprised of some individuals who have experienced IBSA, working alongside scholars and lawyers with expertise in laws related to online IBSA.

For this project, students will work directly with expert law professors to assess a draft state bill regulating non-consensual deepfake pornography. The professors wrote and revised the draft bill at the request of a lawmaker and will act as intermediaries between her and the students. To assess the bill, students will immerse themselves in various First Amendment and other legal issues concerning online speech and privacy, becoming experts in deepfake technologies in the process. They will produce a series of memoranda supporting specific language revisions that could minimize First Amendment challenges to the bill before it is introduced.²⁶⁰

Though this project helps advocate for survivors of IBSA increasingly subjected to deepfake harms with the help of generative AI tools, 261 it does not meet many of the framework's requirements. The students would work directly with two experts on a discrete policy outcome—the drafting of a bill—who are part of a movement organization in solidarity with a marginalized community, those who have experienced online

²⁵⁹ See History/Mission/Vision, Cyber C.R. Initiative, https://cybercivilrights.org/about/ (last visited Aug. 20, 2024).

²⁶⁰ The bill was officially introduced before the state legislature in early 2023 and was enacted in early 2024. *See Gong-Gershowitz Sees "Deepfake" Bill Pass House*, Jennifer Gong-Gershowitz (Apr. 12, 2023), https://www.gonggershowitz.com/gong-gershowitz-sees-deepfake-bill-pass-house/; *New Illinois Laws 2024: Full List of Laws in Effect on Jan. 1*, ABC7 Chi. (Feb. 12, 2024), https://abc7chicago.com/new-illinois-laws-2024-full-list-pritzker/14184011/ (listing HB 21213: Digital Forgeries).

²⁶¹ See, e.g., Matt Burgess, The Biggest Deepfake Porn Website Is Now Blocked in the UK, Wired (Apr. 19, 2024, 12:54 PM), https://www.wired.com/story/the-biggest-deepfake-porn-website-is-now-blocked-in-the-uk/; Kat Tenbarge, Beverly Hills Middle School Expels 5 Students After Deepfake Nude Photos Incident, NBC News (Mar. 8, 2024, 12:55 PM), https://www.nbcnews.com/tech/tech-news/beverly-hills-school-expels-students-deepfake-nude-photos-rcna142480; Nicholas Kristof, Deepfake Porn Sites Used Her Image. She's Fighting Back, N.Y.Times: The Opinions Podcast (Apr. 8, 2024), https://www.nytimes.com/2024/04/08/opinion/deepfake-porn-tech.html.

IBSA, 99% of whom are women.²⁶² Their choices in crafting the regulation were made with this community in mind, so students would learn how to analyze the legal consequences of certain draft provisions while centering the needs of this community. Despite this alignment with a social movement, however, the students are not developing integrated advocacy skills like community education or campaign strategy, as this project does not involve broader political activities outside of assessing a draft bill. The students would develop their legal reasoning and writing skills by working through First Amendment arguments against such legislation, but no more.

Finally, the project's outcome just marginally aligns with the non-reformist criteria of shifting money, discretion, or power over nonconsensual deepfake pornography away from deepfake developers or state actors to affected communities directly. If passed, the bill contains a private right of action that enables survivors of nonconsensual deepfakes to sue creators after the fact, slowly, through case-by-case litigation. At best, the proposed bill represents a first step in increasing state power to regulate the internet to prevent online IBSA, which could usher in survivor-led lawsuits that may eventually recompensate harm.²⁶³ But for project selection purposes, that result may be too attenuated to pass muster.

2. Somewhat Likely: Just Futures Law

This project involves a conventional tech clinic output—a draft amicus brief—but for an unconventional client. Just Futures Law (JFL) is a movement lawyering organization committed to immigrant justice. They seek to "transform how litigation and legal support serves communities and builds movement power," and they often work in coalition with community organizers and activist groups.

Students would work directly with the Co-Founder and Legal Director of the organization in a lawsuit against Clearview AI, a notorious facial recognition company who licenses its application to law

²⁶² Lucy Morgan, *It's Not Just Taylor Swift*—All *Women Are at Risk from the Rise of Deepfakes*, Glamour Mag. (Jan. 31, 2024), https://www.glamour.com/story/taylor-swift-all-women-are-at-risk-from-the-rise-of-deepfakes. 98% of all deepfake videos online are pornographic videos. *See 2023 State of Deepfakes*, Home Sec. Heroes, https://www.homesecurityheroes.com/state-of-deepfakes/ (last visited Aug. 20, 2024).

²⁶³ More recently, federal lawmakers are considering two competing bills regulating non-consensual deepfake pornography. One puts the burden on social media platforms to take down such content, while the other allows survivors to sue people who held, created, or distributed such content. *See* Emily Wilkins, *New AI Deepfake Porn Bill Would Require Big Tech to Police and Remove Images*, CNBC (June 18, 2024, 5:00 AM), https://www.cnbc.com/2024/06/18/senate-ai-deepfake-porn-bill-big-tech.html.

²⁶⁴ See About Us, Just Future L., https://www.justfutureslaw.org/about (last visited Aug. 20, 2024).

enforcement agencies throughout the United States.²⁶⁵ The lawsuit represents several immigrant rights activists and organizations, including Mijente and NorCal Resist, who allege that Clearview's facial recognition app violated several of their privacy and First Amendment rights when local police departments licensed it to use in identifying protestors. Students will work on a draft amicus brief that challenges Clearview's spurious legal defenses.

Although students would produce an amicus brief, this project could still pass the framework for several reasons. First, it represents a movement-aligned client in JFL on a case that was brought to protect the ability of activists and organizers to continue to protest the state's treatment of their immigrant community members. Next, through its alignment with movement actors, the students will be able to practice integrated advocacy by drafting opinion pieces for a general audience derived from their legal research for the amicus brief, doing important translation work around the case that makes their technical and legal expertise more legible to interested readers. Because the lawsuit seeks an injunction on the police's use of Clearview's dangerous carceral technology, a supportive amicus brief could help bring about this outcome. An injunction banning police use is a non-reformist outcome that shifts money, discretion, and power directly away from the technology company and state actors involved—at least in the police jurisdictions involved in this case.

3. Most Likely: Domestic Care Workers Alliance & National Consortium for Independent Living

The last project represents a coalition of domestic care workers and care recipients, primarily people with disabilities and seniors. Students will work on the coalition's campaign to end Electronic Visit Verification (EVV) systems that track care workers' services, as required by federal law for care programs funded by Medicaid. EVV systems vary depending on the technology company providing the platforms, but generally they are workplace monitoring tools that track a worker's time, location, and other personal data to confirm whether they are actually doing their job. Hill originally sold as a time-keeping tool to reduce "fraud, waste, and abuse" in publicly-funded care services, in practice

²⁶⁵ See Kashmir Hill, *The Secretive Company That Might End Privacy As We Know It*, N.Y. Times (Jan. 18, 2020), https://www.nytimes.com/2020/01/18/technology/clearview-privacy-facial-recognition.html.

²⁶⁶ See 21st Century Cures Act, H.R. 34, 114th Cong. § 12006 (2016).

²⁶⁷ See Serena Oduro, Brittany Smith, & Alexandra Mateescu, Data & Soc'y, Electronic Visit Verification: A Guide to Intersecting Harms and Policy Consequences (2021), https://datasociety.net/wp-content/uploads/2021/11/EVV_PolicyBrief_11162021.pdf.

EVV flags non-compliance with program rules to minimize costs—including the amount that workers deserve to be paid for their labor.²⁶⁸ There is no clear limit federally to what EVV technologies can collect, incentivizing companies to design systems geared for invasive data collection.²⁶⁹ EVV systems may use GPS location tracking, geofencing, and biometric data like facial and voice recognition to track care workers directly and recipients indirectly.²⁷⁰ The mandated use of EVV has made both groups "feel[] criminalized," enforcing ableist assumptions that recipients are homebound which disability rights activists have worked hard to refute, with EVV "enforcing a state of de facto house arrest."²⁷¹

While labor and disability rights groups oppose these systems, several companies profit from multi-year contracts to provide EVV systems in various states.²⁷² Labor and disability rights advocates continue to call on lawmakers to repeal the EVV mandate, but their calls have fallen on deaf ears. Meanwhile, the incidences of care worker fraud are far from widespread, despite the justifications for the mandate. In California, which has the largest care workforce in the country, one report found a fraud rate of 0.04% statewide.²⁷³ Instead of investing in the care economy directly, enabling workers to receive higher than the poverty-rate salaries they make today and respecting the independence of care recipients, states complied with the mandate by investing in private companies' technology solutions—surveillance systems built off ableist assumptions that trap a largely woman-of-color, immigrant workforce in an inescapable stream of datafication.²⁷⁴

Working together with care workers' unions and disability rights activists, students will write a coalition letter to the Centers for Medicare and Medicaid Services, as well as lawmakers on the Committee on Health, Education, Labor, and Pensions, supporting the repeal of the

²⁶⁸ See Virginia Eubanks & Alexandra Mateescu, "We Don't Deserve This": New App Places US Caregivers Under Digital Surveillance, Guardian (July 28, 2021, 6:00 AM), https://www.theguardian.com/us-news/2021/jul/28/digital-surveillance-caregivers-artificial-intelligence.

²⁶⁹ Oduro, Smith, & Mateescu, *supra* note 267, at 4.

²⁷⁰ *Id*.

²⁷¹ Id. at 4, 6.

²⁷² For example, Ohio rolled out their EVV program in 2018 after awarding a seven-year, \$66.5 million contract to vendor Sandata Technologies and issued smartphones to service recipients without advance notice, training, or information on their data collection practices. *Id.* at 5.

²⁷³ Nat'l Council on Indep. Living, Electronic Visit Verification (EVV) Task Force Statement of Principles and Goals (2018), https://www.ncil.org/wp-content/uploads/2018/10/10-15-18-EVV-Principles-and-Goals.pdf.

²⁷⁴ See Carmen Roberts, Recognizing Our Essential Workers: The Women of the Long-Term Care Industry, Ms. Mag. (Apr. 18, 2023), https://msmagazine.com/2023/04/18/biden-child-care-caregivers-executive-order/ (women represent just over 50% of the population but make up 87% of the home care industry, 62% are people of color and 31% are immigrants).

federal EVV mandate. Additionally, they will work with on-the-ground activists to identify states, like California, where previous advocacy has pushed EVV systems into less invasive practices, using lessons learned from these efforts to create community education materials that the clients can circulate to their members.

This project easily passes the framework. It represents two movements—care workers and people with disabilities and seniors receiving care—and it represents a non-reformist outcome, banning EVV systems. This would shift discretion directly into the hands of activists, as well as funding away from tech companies providing these systems back into public coffers. It involves integrated advocacy skills and puts students in direct contact with those most affected by EVV today, inspiring disorienting moments crucial for data justice readiness.

Conclusion

With the steady stream of datacentric innovations in the past few decades, our current technology ecosystem has begun to feel inevitable. For each complex social issue, there is a tech company that has or will raise immense sums of capital to produce a reductive, data-hungry technology solution. As a result, corporate data power touches almost every economic sector, moving resources and investments away from communities who need them most to support the development of private technologies for state control purposes.

This is the datafied status quo, and it has only intensified in the couple of decades in which both tech clinics and many of their students have existed. So far, tech clinics have not explicitly committed to representing budding resistance movements that fight for more liberatory, democratic, and collective tech futures. This Article serves as a call to action for tech clinics to meet the moment by adopting a data justice vision to guide their pedagogy.

By representing mobilized clients on non-reformist tech reform projects that involve integrated advocacy skills, tech clinics can intentionally bring their work in alignment with a data justice vision and prevent their work—and their students—from falling in line with the status quo. Tech clinics could become incubators for participatory democracy in a technology ecosystem currently defined by massive power differentials between the tech industry and the state, on the one hand, and the public on the other.²⁷⁵ Students will gain advocacy skills that go beyond litigation to include media strategy, campaign advising, and community education, to name a few. They will also gain critical thinking skills, including the ability to think critically about the role of the law and legal systems in their clients' oppression.

²⁷⁵ See Archer, supra note 170, at 412.

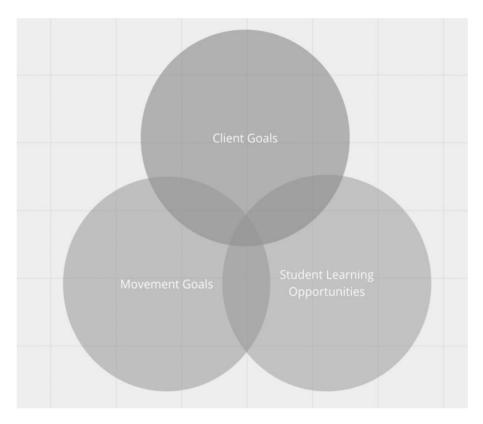
By working on data justice-aligned projects, students will help empower those who are most directly harmed by these technologies but who have the least political ability to transform them. Through one non-reformist tech reform project at a time, tech clinics can help build the transformative tech futures all people deserve.

APPENDIX

Draft Clinical Mission & Intake Form

The Technology Law and Policy clinic prioritizes clients who have a nexus with mobilized communities to confront, resist, and limit the harms of carceral technologies. These are data-driven tools that classify and control marginalized communities, especially through government programs that outsource social services to corporate technology solutions. The clinic centers marginalized groups affected by such technologies, programs, and policies that are often used to harm their communities, which already face systemic racial, social, economic, and political inequities. Carceral technologies may include biometric surveillance tools, predictive policing, automated decision systems, smart border and city initiatives, and more. We aim to create space within public-interest practice to work with movements to build grassroots power and better represent directly affected communities in tech policy advocacy, attending to clients' own methods of resisting algorithmic violence to shape responsive data justice outcomes.

Our students engage in advocacy that links legal and political skills, including brief writing and oral advocacy, community education, media relations, researching and drafting policy language, writing legal opinions to support policy positions, counseling movement organizations on legal strategy, and coordinating direct action. In the movement lawvering tradition, client needs and priorities shape clinical fieldwork and outputs. We prioritize projects whose outcomes may help shift money, discretion, and/or power over data-driven technologies to those most affected by their deployment. This approach reduces the scale of data harms and empowers mobilized clients to influence tech law and policy directly, challenging the tendency of professionalized experts to dominate the conversation and allowing new narratives beyond a privileged focus on fairness, accountability, and transparency tweaks that fail to reduce corporate data power. Students will have the unique opportunity to gain legal expertise in data justice issues that bridge tech and social justice, while learning about various movement lawyering strategies that legal advocates have developed in successful campaigns beyond the digital sphere.



Project Intake Assessment

The purpose of this assessment is to ensure a close fit between the potential client's goals, our clinic's mission, and student learning opportunities. The following questions are a guide for clinicians and students during and/or following client intake conversations to reflect, assess, and tweak potential projects as needed.

Prospective Client Information

Name (Direct Client):

Organization:

Phone:

Email:

Address:

Clinic Contact:

(1) Client Goals

Type of Client

Note: Any classifications should be made by the prospective client directly.

Tech	Justice	Organization,	Coalition/Collective,	or
Activi	st(s)			
Other Social Justice Organization, Coalition/Collective, or				
Activi	st(s)	_		
501(c)	(3) Nonp	profit		

Client's Advocacy Goals and Represented Communities

What are the client's goals in their advocacy? If they have a mission statement, please include it below.

For example, the organization Stop LAPD Spying has both a general mission statement and a zine gathering its organizing principles. At its root, the organization is abolitionist and "work[s] to build community power toward abolishing police surveillance."

Which communities does the client serve? Mark all that apply.

□ BIPOC or other racial/ethnic minority communities
□ Poor and economically underserved communities
□ LGBTQ communities
□ Immigrant/Asylum-seeking/Undocumented communities
□ Disabled communities
□ Laborers, especially in low-protection industries (i.e., gig economy, sex work, factory & agricultural work)
□ Others:

(1) "Fit" Between Client & Movement(s) Goals

A social justice movement is a movement of people who believe, organize, and act to confront oppressive, unjust, and undemocratic realities including racial inequity, economic exploitation, and cultural exclusion. Several movements combat white supremacy and racial discrimination, gender and sexuality discrimination, socioeconomic oppression, and national origin discrimination integral to systems of segregated housing, the prison industrial complex, the military industrial complex, police brutality, immigration enforcement, surveillance and censorship, labor exploitation, violence against wom*n and sex workers, U.S. economic and military intervention globally, corporate malfeasance, and human-made climate catastrophes. Most movements are made up of several communities, organizations, and activists who form coalitions to leverage people power and affect change through legal, political, and social means, acting as a counterweight to corporate and state interests.

Is the client part of a broader social movement for racial, economic, social, and/or political justice?

Please	e specify (mark all that may apply):			
	acial Justice (BIPOC-focused)			
	conomic Justice			
	nmigrant Rights			
	abor/Worker Rights rison/Police Abolition			
	ducation & Youth Advocacy			
	ousing/Tenants Rights			
	ivic Participation & Voting			
	ther:			
munities a	are the goals of those movement(s) generally? Which com- are served by the movement, and which institution(s) and/or of injustice does the movement seek to confront, resist, and/ tle?			
	are some examples of the client's past or current work ad-			
	the goals of the movement(s)? blicable, who else does the client typically work with or align			
	eir advocacy (i.e., membership in coalition(s)).			
(2) Stude	2) Student Learning Opportunities			
cl re ta ve te	What type(s) of technologies, programs, and/or policies is the lient seeking help with? Is the client seeking to limit and/or exist a tech-based development (ex. increased surveillance argeting) that harms their community(ies)? Is the client's adocacy otherwise hampered or compromised by a particular echnology, program, or policy? Please elaborate.			
	Now does the specific technology, program, and/or policy at usual harm the client's members and broader community(ies)?			
3. W	What is the client's desired outcome(s) or end product(s) for			
	nis project? How will such outcome(s) further the client's			
4. W	oals articulated above? What forms of political legal advocacy will students undertake s part of their client representation? Mark all that may apply.			
□ Li	tigation skills – brief writing, oral advocacy, litigation strategy, c.			
	policy advocacy – researching and drafting policy language, roposing policy solutions, supporting client's policy positions			

with written legal opinions, counseling client on different legal strategies and negotiation tactics in meetings with policymakers

or private actors

Supporting actions – advising and defending protestors, counseling client on benefits of different kinds of actions including legal risks
Public awareness & community education – writing public-facing opinion pieces and other advocacy publications, creating educational resources on legal strategies and related project findings for community members, drafting administrative or other strategic materials to advance client's advocacy and outreach/scope
Coalition-building – interfacing with relevant stakeholders, including affected community members, government officials, other organizations, movement actors (including lawyers), etc.

5. Would the outcome(s) or any substantive aspect of this project work to shift (1) money, (2) discretion, (3) or power over this technology to affected communities and away from industry and state actors?

(1) Money:

How does it redistribute funding and resources from company and/ or state actors to targeted communities?

How does it improve the community's material conditions?

(2) Discretion:

How does it move authority from elite/specialist voices to the most marginalized members affected by the technology, program, or policy at issue?

How does it empower community members to understand, redesign, and/or refuse the technology *before it is deployed*?

How does it create space for community-led experimentation with the technology, program, or policy as a result?

(3) Power:

How does it reduce the capacity for companies and/or state actors to target, classify, coerce, punish, and/or control marginalized communities, including people of color, women, queer and trans* folks, immigrants, poor people, disabled people, unhoused people, incarcerated or formerly incarcerated people, sex workers, and others?

How does it reduce the scale of the technology's effect on marginalized communities?

How does it reduce the government's reliance on algorithmic violence? Algorithmic violence is the harm that algorithm-based systems inflict by preventing people from meeting their basic needs, resulting from and amplified by exploitative social, political, and economic systems.

Other Considerations

Are there other clinics at your law school or other law schools that work with the movement(s) this project is associated with? If so, does the project present interclinic collaboration opportunities that would maximize client goals, movement goals, and student learning opportunities?

Will this client/project likely require representation beyond one semester?

Are there any personnel, resources, conflicts, or other constraints that would impact the clinic's ability to represent his client/project?

If known, how did the client learn about the clinic? Have they worked with this or other law school clinics before?

Technology Guide

There are several examples of emergent technologies, programs, and policies that a social justice-oriented client may be seeking help with from the clinic. Under the "Student Learning Opportunities" section, the first question is meant to be open-ended to enable flexible fact gathering. Still, some clients may not have a specific example in mind or may not have the terminology or ability to describe the technology at issue.

If needed, below is a short list of emergent technologies that commonly raise data justice issues by compounding pre-existing economic, social, and political inequity. In this sense, "data justice" is a corrective approach to tech development and regulation that works to rectify data-driven harms to an individual or community within the broader context of structural inequalities inherent to racial capitalist systems.

Ш	Biometric Surveillance (facial recognition, emotion/affect rec-					
	ognition, automated gender recognition, DNA/Genetic infor-					
	mation tracking)					
	Predictive Policing Programs & Databases					
	Private/Public AI Partnerships					
	E-Carceration (pre-trial & migrant digital detention)					
	Automated License Plate Readers					
	Smart Border Technologies					
	Gig Work &/or Hiring, Workplace, Anti-Labor Organizing					
	Surveillance					
	Education Surveillance (Testing, Student Social Media Use,					
	Gun "Safety", etc.)					
	Public Benefits Technologies, Including Housing & Healthcare					
	Other:					