# Position: The Right to AI

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## **Abstract**

This position paper proposes a "Right to AI," which asserts that individuals and communities should meaningfully participate in the development and governance of the AI systems that **shape their lives.** Motivated by the increasing deployment of AI in critical domains and inspired by Henri Lefebvre's concept of the "Right to the City," we reconceptualize AI as a societal infrastructure, rather than merely a product of expert design. In this paper, we critically evaluate how generative agents, large-scale data extraction, and diverse cultural values bring new complexities to AI oversight. The paper proposes that grassroots participatory methodologies can mitigate biased outcomes and enhance social responsiveness. It asserts that data is socially produced and should be managed and owned collectively. Drawing on Sherry Arnstein's Ladder of Citizen Participation and analyzing nine case studies, the paper develops a four-tier model for the Right to AI that situates the current paradigm and envisions an aspirational future. It proposes recommendations for inclusive data ownership, transparent design processes, and stakeholder-driven oversight. We also discuss market-led and state-centric alternatives and argue that participatory approaches offer a better balance between technical efficiency and democratic legitimacy.

## 1. Introduction

We posit that every individual and community affected by artificial intelligence (AI) systems has a *Right to AI*: the capacity and entitlement to shape, critique, and govern the AI infrastructures that increasingly define modern life. AI is proliferating in domains such as healthcare, education, finance, and urban planning, generating both

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innovation and ethical, legal, and socio-political concerns (Lepri et al., 2018; Avellan et al., 2020; Larsson, 2020; Taeihagh, 2021; de Hond et al., 2022; Queerinai et al., 2023; Huang et al., 2024a; Zhou et al., 2024; Zhang et al., 2025; Goodman & Dai, 2025). While the transformative potential of AI is evident, disparities in its design and deployment reveal patterns of algorithmic bias, challenges with algorithmic fairness, as well as risks to privacy, among other human rights concerns (Brayne, 2017; Arslan, 2017; Costanza-Chock, 2020; Shepardson et al., 2024; Cohen & Suzor, 2024; Ulnicane, 2024). Many development practices continue to prioritize efficiency and scalability at the expense of inclusion, often excluding the public from meaningful participation in AI governance (Kalluri, 2020; Sloane et al., 2022; Bengio et al., 2024; Kirk et al., 2024). The growing concentration of design decisions within a limited set of corporate and governmental entities—whether in setting priorities, allocating resources, or determining deployment practices—risks marginalizing public agency and reducing individuals to passive recipients of technological systems that increasingly shape their opportunities, well-being, and autonomy (Raz, 1999; Reisman et al., 2018; Huang et al., 2024a; Cohen & Suzor, 2024; OpenAI & SoftBank, 2025; Goodman & Dai, 2025).

We adopt Henri Lefebvre's Right to the City framework (Lefebvre, 1968)—which challenges top-down urban planning by emphasizing resident participation in creating livable urban spaces—and extend its spirit to the digital sphere. In this view, AI functions as societal infrastructure, necessitating broad-based, co-creative involvement analogous to city building or community-led educational reforms (Jacobs, 1961; Ng, 2017; Sloane et al., 2022; Birhane et al., 2022). The "ladder of citizen participation" (Arnstein, 1969) highlights how engagement can range from tokenistic consultation to meaningful empowerment, underscoring the need to address entrenched power asymmetries (Costanza-Chock, 2020; Birhane et al., 2022). As historical movements have shown, genuine participation can only emerge when communities and stakeholders, much like Jane Jacobs' grassroots advocacy for urban neighborhoods (Jacobs, 1961), actively organize and demand a seat at the table.

The Right to AI builds on precedents in human rights and technology. Article 27 of the *Universal Declaration of Human Rights* affirms the right to "share in scientific ad-

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vancement and its benefits," and the United Nations has recognized internet access as a fundamental right (Sun, 2020; Wenar, 2023). The Right to AI not only builds on these foundations but also *emphasizes collective empowerment* (Sun, 2020), extending the focus from mere access to a *power right* that allows individuals and communities to meaningfully influence AI systems (Wenar, 2023). When AI is trained on public data—collected from social platforms, government databases, or shared cultural artifacts—transparency and accountability become paramount to avoid a new form of "data enclosure," in which public knowledge is commercialized without returning benefits to the communities that produced it (Beer, 2016; Kitchin, 2016; Nucera & Onuoha, 2018; Lewis et al., 2020; Gerdes, 2022).

By conceptualizing AI as a collective resource, the Right to AI foregrounds public involvement in setting objectives, establishing constraints, and determining acceptable risks. This includes interrogating how personal information is collected and shared (Marmor, 2015; Wachter & Mittelstadt, 2019), ensuring that AI systems do not perpetuate statistical discrimination or erode autonomy (Kalluri, 2020; Sloane et al., 2022), and fostering mechanisms that enable broader oversight and scrutiny. In practice, it calls for a governance framework encompassing local AI councils, public audits, cooperatively managed data infrastructures, and other participatory structures that reconcile intellectual property rights with communal stewardship of AI (Ostrom, 1996; Jacobs, 1961; Lewis et al., 2020; Sun, 2020; Wenar, 2023).

The paper's core thesis is that the optimal approach to AI governance is through a citizen-engaged process that guarantees the right to contribute, supported by a four-pronged argument for the Right to AI. We argue that inclusive and pluralistic structures can better address biases, reflect diverse values, and strengthen democratic ideals. Section 2 situates our Right to AI proposal in the broader literature on participatory methods. Section 3 examines AI as societal infrastructure. Section 4 presents key democratic, social justice, and epistemic justifications. Section 5 introduces a four-tier model of citizen involvement, and Section 6 distills lessons from relevant participatory projects. Finally, Section 7 offers steps toward realizing the Right to AI, Section 8 addresses critiques of existing governance models, and Section 9 reflects on AI as a co-created resource.

We use the term "Right to AI" to emphasize the collective governance dimension of AI oversight. This governance-oriented right is broader than more familiar claims such as the right to be forgotten, the right to explanation, or the right to contest AI decisions (Kaminski, 2019; Kaminski & Urban, 2021; Zhang et al., 2024). These latter rights, while important, speak mostly to individual entitlements

to correct or clarify AI outputs. By contrast, the Right to AI we propose extends beyond mitigating harms to actively co-shaping the objectives, data practices, risk thresholds, and ethical principles of AI infrastructures. In this sense, it is more accurately viewed as a "power right" (Wenar, 2023) to guide AI's development, rather than a narrower right to information or redress.

For a deeper exploration of additional arguments—including the *Hidden Choices* analogy that compares AI to a community "kitchen," highlighting ownership, access, and accountability—see Appendices A to F, where we further discuss the broader ethical and socio-political implications of the Right to AI.

## 2. Background

#### 2.1. Positioning the Right to AI

The contemporary discourse on AI governance spans policy proposals, ethical guidelines, and technical methods aimed at aligning AI with societal values (Mishra, 2023; Zaidan & Ibrahim, 2024; Sorensen et al., 2024). Institutions such as the OECD and the European Union have introduced frameworks for responsible AI development, often emphasizing fairness, accountability, and transparency (Jobin et al., 2019; Bang et al., 2024; Saheb & Saheb, 2024; Zhang et al., 2025). However, these proposals typically operate within top-down or expert-led paradigms, granting only peripheral or transactional roles to civic engagement (Jobin et al., 2019; Saheb & Saheb, 2024; Kirk et al., 2024; Huang et al., 2024a).

Recent work in *participatory AI* seeks to bridge this gap by integrating stakeholder perspectives throughout the AI lifecycle, from data collection to deployment and auditing (Sloane et al., 2022; Birhane et al., 2022; Sieber et al., 2024a). Some researchers explicitly call for *pluralistic alignment*—the notion that AI systems should be responsive to multiple moral and cultural perspectives (Sorensen et al., 2024). Yet, practical implementations often face logistical and conceptual hurdles, including defining fair representation across heterogeneous communities and reconciling conflicting values within a single system (Hoffmann et al., 2022; Mishra, 2023; Sorensen et al., 2024; Zhou et al., 2024; Kirk et al., 2024; Jin et al., 2024; Zhang et al., 2025).

## 2.2. The Right to the City

Henri Lefebvre's *Right to the City* is a foundational concept in urban theory that rejects the fragmentation of city life into discrete, expert-managed sectors. Instead, it asserts a universal right for citizens to actively shape urban processes (Lefebvre, 1968). The concept emphasizes inclusivity, accessibility, and democracy, advocating that urban spaces should be collectively governed rather than controlled solely by market forces such as commodification and capitalism.

Lefebvre's vision presents this right not as an individual entitlement but as a collective one, grounded in shared power and responsibility for shaping urban life.

Recent scholarship has expanded this framework by addressing contemporary urban struggles, emphasizing digital infrastructure, environmental justice, and participatory governance (Harvey, 2012; Purcell, 2014; Madden & Marcuse, 2017). Scholars critique the ways in which smart city initiatives, surveillance capitalism, and privatization constrain democratic urban participation. The parallels to AI governance become evident as we acknowledge AI's pervasive impact on daily life, from news curation to resource allocation (Leike et al., 2018; Koseki et al., 2022; Kitchin, 2023; Hajkowicz et al., 2023). Just as Lefebvre opposed the technocratic vision of cities as objects of specialist knowledge, the *Right to AI* challenges the notion of AI as an exclusively expert-driven endeavor.

#### 2.3. Ladder of Citizen Participation

Sherry Arnstein's ladder of citizen participation defines eight distinct levels of citizen involvement, spanning from manipulation at the bottom to citizen power at the top (Arnstein, 1969). At the lowest rungs—manipulation and therapy-efforts aim merely to educate or "cure" participants without granting real influence. Progressing upward, forms of tokenism such as informing, consultation, and placation may appear to involve citizens, but often conceal deeper imbalances in decision-making power. The ladder serves as a guide to understanding how genuine power sharing can be distinguished from superficial involvement in decisionmaking processes (see Figure 1). Applied to AI, this hierarchy helps conceptualize the degree of public involvement in system design and oversight. Current findings suggest that traditional AI practices often situate users at the "informing" or "consultation" rungs at best, rarely reaching the top rungs of "partnership" or "citizen control" (Sieber et al., 2024a). Building on this framework, recent studies highlight the growing importance of civic participation and public engagement in AI (Sieber et al., 2024b). Thus, Arnstein's framework serves as a valuable lens for assessing how much decision-making power stakeholders genuinely exercise.

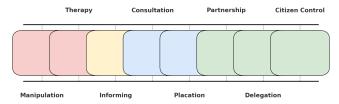


Figure 1. The Ladder of Citizen Participation, illustrating levels of public involvement from manipulation to citizen control.

#### 2.4. Grassroots Engagement

Jane Jacobs' *The Death and Life of Great American Cities* (Jacobs, 1961) critiqued large-scale, expert-led urban redevelopment projects. Jacobs argued that community-level knowledge is often disregarded in top-down models, leading to detrimental effects on neighborhoods. Her grassroots approach resonates with the Right to AI: communities affected by AI systems also possess contextual insights that can inform more ethical, value-aligned, context-sensitive development and deployment (Arslan, 2017; Angwin et al., 2022; Birhane et al., 2022; Mushkani et al., 2025a).

Previous attempts to incorporate participation in AI governance include user feedback loops in recommender systems, collaborative training data annotation, and community reviews of AI outputs (Gerdes, 2022; Zaidan & Ibrahim, 2024; Huang et al., 2024a). Innovative proposals like "jury-based" or "constitutional" approaches also engage diverse groups in AI ethics and policy deliberations (Gordon et al., 2022; Bai et al., 2022b; Sorensen et al., 2024). However, these methods are nascent and face scalability, political, market, resource, and institutional challenges (Saheb & Saheb, 2024; Zaidan & Ibrahim, 2024; Huang et al., 2024a).

## Yet participation alone is not inherently empowering.

It can become tokenistic—what some call "participation-washing"—when stakeholders are invited without real decision-making power or follow-through. In high-stakes contexts, such as healthcare or criminal justice, participation may also be constrained by the need for technical oversight or legal accountability. These realities suggest that participatory frameworks must be adapted to the specific risks, knowledge demands, and institutional capacities of each domain. Genuine inclusion requires not just the presence of diverse voices, but mechanisms that translate deliberation into influence.

Overall, the Right to AI builds on these developments but asserts a more foundational principle: that AI governance should not merely consult communities but *empower* them to define AI's priorities, constraints, and uses. This shift toward recognizing AI as shared societal infrastructure underpins the arguments we develop in subsequent sections.

## 3. Arguments for AI as Societal Infrastructure

A central premise of the Right to AI is that AI increasingly functions as *societal infrastructure*, comparable to utilities or educational systems. Viewing AI as *societal infrastructure* aligns with established frameworks of public goods, commons governance, and socio-technical systems (Ostrom, 1990; Graham & Marvin, 2001). Infrastructure commonly exhibits three properties: (i) *broad societal impact*, (ii) an *essential role* in daily life, and (iii) a requirement for *collective management* (North, 1990; Davern et al., 2017). AI,

particularly foundation models shaping decisions having to do with employment, credit scoring, and public discourse, for example, arguably meets these criteria.

**Broad Societal Impact** AI systems are being embedded as a matter of standard practice across industries such as healthcare and education, influencing areas of high social impact such as diagnostic processes and learning environments (Bommasani et al., 2022; Goodman & Dai, 2025). This pervasive integration of AI highlights the need for inclusive governance mechanisms that address the wide-ranging social implications, including ethical considerations, societal norms, and the long-term effects on communities and institutions.

Essential Role in Daily Life Technologies that mediate access to financial systems, public services, and employment increasingly function as core societal infrastructure (North, 1990). AI-driven decision-making in credit approval, job screening, and social welfare administration underscores its role in structuring life chances (Eubanks, 2018; Benjamin, 2019). The opacity of these systems necessitates governance mechanisms akin to those regulating financial and legal infrastructures (Ulnicane, 2024).

Collective Management AI-based systems shape social interactions, political communication, and institutional trust (Gillespie, 2018; Kitchin, 2023). Like other infrastructures, AI is not neutral; it embeds political, economic, and cultural assumptions that shape its societal consequences (Crawford, 2021; Angwin et al., 2022). Without participatory oversight, AI risks reinforcing inequities rather than serving as a mechanism for collective well-being.

Urban planning frameworks, such as the *Right to the City*, provide insights into collective governance of infrastructure, but AI differs in its algorithmic opacity and dynamic evolution (Birhane et al., 2022). Effective governance may thus require adaptive regulatory structures, participatory audits, and interdisciplinary expertise to navigate its societal impacts (Ostrom, 2009; Murray & Frijters, 2017).

## 4. Arguments for the Right to AI

The Right to AI is grounded in four distinct but overlapping arguments: *democratic legitimacy*, *social justice*, *epistemic autonomy*, and *data production*, emphasizing the necessity of community participation for ethical and effective AI.

#### 4.1. Democratic Legitimacy

Democratic theories posit that decisions affecting the public should include input from those impacted (Dahl, 1971; Habermas, 1996). AI systems exert significant influence, shaping access to loans, recommending political content,

and determining university admissions. The widespread adoption of generative agents in the coming years is expected to further amplify this impact (Dastin, 2022; Jin & Zhang, 2025). To align with democratic principles, citizens must have the right to deliberate on data usage, algorithmic objectives, and mechanisms for redress (Mill, 1863; Habermas, 1996; Buruk et al., 2020). Without such participation, AI governance risks becoming an unaccountable domain controlled by elites (Benjamin, 2019).

#### 4.2. Social Justice and Pluralism

Machine learning models typically generalize from large datasets, which may fail to capture minority values or nuanced cultural norms (Goodfellow et al., 2016; Gebru et al., 2021; Dastin, 2022). As a result, marginalized voices risk erasure or misrepresentation (Raz, 1999; Beer, 2016; Bondi et al., 2021; Zhang et al., 2025). The Right to AI entails inclusive governance structures that protect pluralism by ensuring that multiple moral and cultural frameworks inform system design (Lefebvre, 1968; Costanza-Chock, 2020). This pluralistic perspective challenges any hegemonic assumption that there is a single "correct" data-driven solution (Fraser, 1995; Kitchin, 2023; Sorensen et al., 2024).

#### 4.3. Epistemic Autonomy

As AI systems filter information, recommend decisions, and shape daily interactions, they hold substantial power to influence knowledge ecosystems (Kalluri, 2020; Ooi et al., 2023; Huang et al., 2024a; Jin & Zhang, 2025). Epistemic autonomy refers to the ability to develop independent perspectives on what is true or valuable (Foucault, 1975; Turri et al., 2021). If AI systems are centralized or controlled by a few entities, they may homogenize culture, intensify specific worldviews, or narrow the range of acceptable discourse (Mill, 1863; Foucault, 1975; Fraser, 1995; Metz & Grant, 2024; Murgia, 2024). The Right to AI protects the capacity of individuals and communities to determine their own epistemic conditions, thereby preserving cultural diversity and safeguarding the evolution of collective knowledge (Dewey, 1927; Habermas, 1996).

#### 4.4. The Production of Data

Data is integral to AI's predictive and generative capabilities (Goodfellow et al., 2016). It is created in diverse social contexts, yet the processes of collection and ownership often remain opaque and concentrated in a few organizations (Kalluri, 2020; Kitchin, 2023). These mechanisms can obscure communal contributions to datasets, allowing organizations to exercise disproportionate influence over data use. Viewing data as a shared resource aligns with Ostrom's notion of collective governance for common-pool resources (Ostrom, 1996). Approaches such as local data

trusts or transparent curation boards may mitigate risks of biased outcomes and privacy infringements by balancing innovation with individual and collective rights (Kukutai & Taylor, 2016; Lewis et al., 2020).

### 4.5. Broader Ethical Implications

Philosophical frameworks such as Design Justice (Costanza-Chock, 2020) call for marginalized community members to be at the center of the AI design and build process. The Right to AI builds on these traditions by advocating for participatory structures at each stage of the AI lifecycle (Jacobs, 1961). By distributing decision-making power and emphasizing co-ownership of data, the Right to AI embeds ethical commitments in technical artifacts and institutional arrangements (Lefebvre, 1968). Through these mechanisms, AI can better align with the values and needs of diverse communities, reinforcing social trust and ensuring that AI remains a form of shared societal infrastructure rather than a purely commercial or technocratic domain.

Moreover, at the international level, disparities in AI development create technological asymmetries between countries, shaping economic and strategic dynamics (Eubanks, 2018; OpenAI & SoftBank, 2025). Expanding access to AI models trained on publicly available data may reduce these imbalances and promote a more competitive and diverse technological landscape (Arslan, 2017).

#### 5. Ladder of Right to AI

We adapt Arnstein's ladder of participation to propose four tiers of engagement in the AI governance process. These tiers are distinguished based on the *extent of stakeholder agency, transparency of decision-making*, and *inclusivity* in shaping AI systems (Lefebvre, 1968; Arnstein, 1969). Although these categories are not exhaustive, they illustrate a spectrum of approaches:

#### **5.1.** Consumer-Based (Minimal Right to AI)

In this lower tier, individuals primarily act as consumers, accessing AI services without substantive input into data practices or decision-making (Baudrillard, 1970; Kitchin, 2023). Participation is typically limited to optional user surveys or feedback forms (Kirk et al., 2024). This model offers convenience but often consolidates authority among system developers. Users have limited capacity to influence model outcomes or address biases, and redress mechanisms are generally weak (Dahl, 1971).

### 5.2. Private Organization-Led

In this tier, private entities integrate limited user feedback into governance structures that they own or manage (Dewey, 1927; Dahl, 1971; Bang et al., 2024; Zhang et al., 2025). Model behavior, training data selection, and interpretability measures remain largely within corporate purview. Transparency mechanisms (e.g., user dashboards) may partially improve accountability, but conflicts of interest can persist (Zhou et al., 2022). Communities retain a delegated form of influence, depending on the extent to which private actors incorporate public input into product roadmaps and ethical guidelines (Baudrillard, 1970; Anthropic, 2023).

#### 5.3. Government-Controlled

Government agencies play a central regulatory role, setting broad guidelines that can include data privacy mandates, anti-discrimination policies, and public consultations (Habermas, 1996; Morison, 2020). This model can increase accountability by establishing enforceable standards, but top-down governance structures may overlook localized knowledge or community-specific concerns (Fischer, 2000). Moreover, government priorities may be shaped by agendas unrelated to broader stakeholder engagement, which can limit the scope of genuine participation (Jacobs, 1961; Moulin, 2004; Kukutai & Taylor, 2016; Morison, 2020).

#### 5.4. Citizen-Controlled (Maximal Right to AI)

At the upper end, citizens have considerable authority over AI governance (Arnstein, 1969; Sloane et al., 2022). This model may involve local data trusts, cooperative ownership of training datasets, and citizen assemblies overseeing deployment and audit processes (Birhane et al., 2022). While such arrangements demand robust institutional support, conflict-resolution mechanisms, and technical expertise, they maximize community control (Lewis et al., 2020; Nekoto et al., 2020; Bondi et al., 2021; Birhane et al., 2022; Sloane et al., 2022). In principle, this tier represents the fullest expression of participatory AI, empowering communities to define model objectives, ethical constraints, and performance metrics (Jacobs, 1961; Arnstein, 1969).

Citizen-controlled governance envisions significant communal authority over AI systems; however, this does not imply the exclusion of domain experts or the adoption of a uniform approach in every context. In critical fields such as healthcare and aviation, for instance, broad participation must be balanced with deep technical expertise to maintain safety and reliability. In these high-stakes domains, effective citizen control may take a hybrid form, wherein communities shape overall values and objectives while specialists guide specific technical parameters. Thus, citizen sovereignty in AI does not preclude expert collaboration; rather, it enables stakeholders to determine when and how specialized knowledge interacts with collective oversight.

Figure 2 illustrates how agency, transparency, inclusivity, and governance structures vary across these tiers. This

progression also highlights the transition from instrumental consumerism to communal sovereignty, guiding evaluations of existing approaches and helping chart paths toward more participatory paradigms.

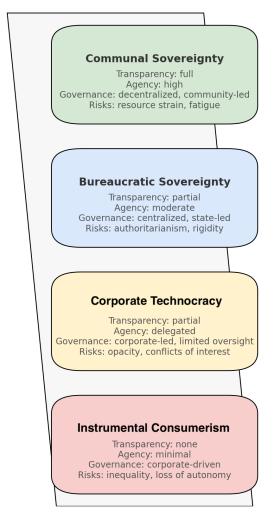


Figure 2. Progression in stakeholder power from minimal engagement (Consumer-Based) to robust self-governance (Communal Sovereignty). This categorization helps assess current initiatives and guide transitions toward more participatory models.

While our four-tier model is inspired by Arnstein's seminal ladder of participation, it introduces AI-specific mechanisms for transitioning between tiers. For instance, the shift from *Consumer-Based* to *Private Organization-Led* may occur when communities adopt structured feedback channels and partner with companies to revise product roadmaps or data-sharing agreements. A subsequent transition to the *Government-Controlled* tier might involve formal policy mandates requiring community audits or the creation of statutory councils with partial decision-making authority over AI deployments. Finally, the *Citizen-Controlled* tier relies on advanced institutional support—such as local or cooperative data trusts with legally enforceable ownership

structures and educational programs that foster the technical competence necessary for meaningful oversight.

At each transition point, stakeholder roles evolve—from reacting to system outputs, to co-managing data and design objectives, to exercising decisive authority over governance processes. By outlining these transitions, we aim to illustrate how communities can incrementally acquire the capacity to shape AI systems, moving beyond surface-level consultation or feedback.

## 6. Lessons from Participatory Practices

The extent to which participatory AI can reconfigure decision-making power—or instead uphold existing technological agendas—remains contested. This section draws on empirical insights from a range of participatory AI initiatives (Table 1) to explore whether stakeholder engagement can meaningfully influence AI design or remains largely symbolic. Although many projects prioritize knowledge sharing rather than deeper power-sharing, they also reveal both the opportunities and constraints that shape more robust forms of community involvement.

Participatory AI initiatives in education, healthcare, urban planning, and software development often involve stakeholders with direct interests in AI-driven decisions (Jacobs, 1961; Lee et al., 2019; Zicari et al., 2021; Zhang & Aslan, 2021; Sieber et al., 2024b). For example, *Co-Design of Trustworthy AI in Healthcare* (Zicari et al., 2021) included patients, clinicians, and ethicists to expose biases in diagnostic tools, leading to enhanced accountability despite resource and expertise challenges. Urban planning efforts, such as *MID-Space* (Nayak et al., 2024), relied on iterative community annotation and mediation to address conflicting priorities (Sloane et al., 2022). These examples highlight both the promise of stakeholder inclusion and the structural, institutional, and practical barriers that may limit its impact.

Across the nine case studies, success factors consistently included the early and sustained involvement of local stakeholders (e.g., language experts, community volunteers), transparent articulation of goals and benefits, and explicit acknowledgment of resource inequalities. For example, in the WeBuildAI case study (Lee et al., 2019), the framework enabled diverse participants—including donors, volunteers, recipient organizations, and staff—to collaboratively design a matching algorithm for donation allocation. Evaluation using historical data revealed that the algorithm produced more equitable outcomes than traditional human-led methods. Specifically, it reallocated donations in ways that better prioritized organizations serving communities with higher poverty rates, lower incomes, and limited food access. Participants reported increased trust in, and clearer understanding of, the algorithmic decision-making process.

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		Table 1. Nine Examples of Participatory AI			
Project	Why It Was Done	How It Was Implemented	Stakeholder Involvement	Domain / Application	<b>Key Outcomes &amp; Impact</b>
Anthropic's Collective Constitutional AI (Huang et al., 2024b)	Align AI with shared values	Ethical constitution, iterative feedback	AI researchers, end-users, ethi- cists	AI alignment	Exposed tensions in ethical frameworks
PRISM Alignment Dataset (Kirk et al., 2024)	Investigate cross- cultural alignment	Surveys of 1,500 participants	International participants, researchers	AI ethics	Revealed cultural disagreements
MID-Space (Nayak et al., 2024)	Democratize design visualization	Community-based annotation	Marginalized groups, planners	Urban planning	Incorporated localized perspectives
Participatory Modelling for Agro-Pastoral Restoration (Eitzel et al., 2021)	Include Indigenous knowledge	Co-created computational models	Farmers, modelers	Environmental sustainability	Context-driven land management solutions
Co-Design of Trust- worthy AI in Health- care (Zicari et al., 2021)	Address bias in medical AI	Iterative design with patients, clinicians	Patients, ethicists	Healthcare	Reduced diagnostic bias, enhanced trust
Project Dorian (Berditchevskaia et al., 2021)	Adapt AI for humanitarian settings	Human-in-the-loop feedback	NGO staff, data scientists	Crisis logistics	Facilitated faster resource allocation
WeBuildAI: Participatory Algorithmic Governance (Lee et al., 2019)	Develop collaborative governance	Workshops with civic groups	Civic groups, public officials	Computer science	Prototype participatory algorithms
Participatory Research for Low- resourced Machine Translation (Nekoto et al., 2020)	Scale NLP for low- resource African languages	Community-driven data collection, annotation, and workshops	African lan- guage speakers, researchers, lin- guists	Machine Translation, NLP	Novel datasets and benchmarks for over 30 languages; enabled community contributions
Māori Data Sovereignty Ini- tiative (Kukutai & Taylor, 2016)	Protect Māori lan- guage data and ensure community benefits	Establish Māori Data Sovereignty Proto- cols, community-led annotation	Māori community, linguists, indige- nous organizations	Language technology, data sovereignty	Controlled data sharing, preservation of autonomy, community-led tech development

**Early Engagement** Several projects, including *Participatory Modelling for Agro-Pastoral Restoration* and *PRISM Alignment Dataset*, show that engaging communities early can reveal cultural or ethical issues before they become entrenched. Delayed consultation often feels tokenistic, limiting participants' ability to influence fundamental design decisions (Arnstein, 1969; Huang et al., 2024b;a).

Conflict Resolution and Power Dynamics Differences in moral frameworks or cultural norms may create tensions if not managed proactively. For example, *PRISM Alignment Dataset* (Kirk et al., 2024) identified cross-cultural disagreements about AI ethics. Resource imbalances can also permit well-funded institutions to dominate agendasetting, marginalizing other voices (Benthall & Haynes, 2019; Eitzel et al., 2021; Cachat-Rosset & Klarsfeld, 2023;

Murgia, 2024; Ulnicane, 2024).

**Resource Commitments** Several initiatives, including *Māori Data Sovereignty Initiative* and *Project Dorian*, relied on training, funding, and organizational support (Kukutai & Taylor, 2016; Berditchevskaia et al., 2021). Communities that cannot independently access these resources may depend on external programs that come with distinct priorities (Tilmes, 2022; Birhane et al., 2022; Gerdes, 2022; Sloane et al., 2022).

Conflation and Cooptation While increasing the number of participants can broaden representation, it does not necessarily equate to deeper engagement (Bohman, 2000; Birhane et al., 2022). Companies may harness grassroots involvement mainly for publicity or profit, reframing local

knowledge for external gain (Mikalef et al., 2022; Murgia, 2024). For instance, in African language machine translation (Nekoto et al., 2020), some community efforts have been repackaged as commodifiable assets by external actors.

Balancing Expert and Local Knowledge Efforts to integrate specialized and local knowledge can face disagreements over data validity, model interpretability, and ethical guidelines (Birhane et al., 2022). Translational strategies—ranging from interdisciplinary facilitation teams to community-guided metrics—can help mediate these gaps (Fischer, 2000; Lee et al., 2021).

Implications for a Right to AI While most cases in Table 1 are context-specific, some show that sustained grassroots advocacy can influence decision-making. Jane Jacobs' fight against highway expansion (Jacobs, 1961) highlights how informed stakeholders and activism shape planning. In AI, persistent public pressure could counter performative engagement. Early participatory methods that grant real decision-making power are more likely to redistribute power, benefiting broader communities.

### 7. Recommendations

To effectively realize the Right to AI, the following recommendations are designed as a collaborative, multi-sectoral effort. Recognizing that structural change cannot be achieved by a single stakeholder alone, these proposals engage a diverse range of actors—including educational institutions, governmental bodies, community organizations, and industry partners—to work together in fostering ethical, accountable, and inclusive AI systems.

Provide Technical and Educational Resources Organizations such as universities, NGOs, and local governments can collaborate to develop workshops, open educational materials, or interactive simulators that demystify AI. These efforts equip community members, public officials, and civic groups with foundational AI knowledge, enabling them to question design choices, scrutinize potential risks, and hold system implementers accountable (Almatrafi et al., 2024). If these initiatives remain underfunded or absent, communities may lack the means to exercise meaningful oversight.

Facilitate Participation Developers, civic tech groups, and service providers may deploy accessible interfaces—such as real-time translations or interactive dashboards—to broaden engagement in AI projects (Anthropic, 2023; Williams et al., 2024; Sieber et al., 2024b). Large language models allow code-free inclusive interfaces, enabling broader participation in AI governance and design. Structured feedback and co-creation sessions encourage non-experts to contribute insights into model objectives or

flagged decisions (Huang et al., 2024a). If these methods are neglected, only a narrow segment of technically proficient stakeholders may shape AI systems.

Formalize Community Assemblies Municipalities, civic groups, and industry partners can establish local AI councils with advisory roles (Bohman, 2000). Over time, these bodies may gain decision-making authority, ensuring public influence on AI-driven processes and preventing ethical or societal oversights.

Establish Data Trusts and Auditing Processes Governments, philanthropies, and private-sector coalitions can create community-based data trusts to govern training data, consent, and benefit distribution (Sieber et al., 2024b; Birhane et al., 2022). Transparent auditing—accessible to both laypersons and experts—would enhance accountability and prevent unchecked data abuses (Zaidan & Ibrahim, 2024).

Localized Adaptation Local AI developers, community organizations, and domain experts can fine-tune generative models with smaller, context-specific datasets (Nayak et al., 2024; Kirk et al., 2024). By involving residents or practitioners in curation and training, these models can better reflect local norms and languages (Mishra, 2023). Failure to integrate local context risks producing irrelevant or culturally misaligned AI outputs, weakening public trust and engagement (Huang et al., 2024a).

Integrate Conflict Resolution and Mediation Policy-makers, community leaders, and mediators can establish transparent panels to address ethical disputes, stakeholder conflicts, and cultural sensitivities (Femia, 1996; Bondi et al., 2021). These panels balance technical feasibility with social imperatives, fostering trust in AI governance. Without them, unresolved conflicts may deter community participation and reinforce power imbalances.

Mobilize Researchers for Community Engagement As machine learning researchers are well equipped to raise awareness and morally support their surrounding communities through communication and dialogue about AI, this responsibility translates into practical steps. **Implementing** the Right to AI would prompt researchers to engage more systematically with non-technical stakeholders. This could involve structuring datasets with transparent documentation, designing interfaces for community feedback, and integrating diverse perspectives into model objectives. Such a shift may introduce time and resource overheads. However, it also alters the dynamics of accountability and offers opportunities to mitigate biases and strengthen public trust. Balancing technical efficiency with meaningful public engagement may require interdisciplinary collaboration, new skill sets-such as facilitation-and iterative design

cycles. Although demanding, this participatory approach can enhance the relevance and robustness of AI systems while reinforcing public confidence in their development.

**Bridge Technical Gaps** Beyond political and normative considerations, substantial technical gaps remain in realizing the Right to AI across all tiers. Participatory systems must offer accessible, language-inclusive interfaces that accommodate diverse forms of engagement and varying abilities, without oversimplifying complex modeling decisions. Moreover, conflict-resolution protocols require both computational and sociotechnical research to systematically integrate diverse perspectives into model design—shifting from disaggregated to aggregated viewpoints in a transparent and traceable manner. The development of explainability and interpretability tools tailored to non-experts remains in its early stages. Finally, reliable methods are needed to validate the quality and relevance of community-contributed data, particularly in regions with limited technical capacity. Addressing these challenges is essential to ensure that the Right to AI becomes not merely aspirational, but operationalized in a sustainable and equitable manner.

## 8. Alternative Views

Some scholars and practitioners question whether broad-based participatory approaches to AI are feasible or desirable. A market-led perspective asserts that competition and consumer choice will naturally drive responsible AI (Dignam, 2020; de Marcellis-Warin et al., 2022; Hadfield & Clark, 2023; Judge et al., 2024), though such models can overlook communities lacking purchasing power or market influence (André et al., 2018; Radu, 2021; Cohen & Suzor, 2024; Ulnicane, 2024). The Right to AI maintains that these gaps warrant structured stakeholder participation to include marginalized voices and address power asymmetries.

Others emphasize strong state oversight to ensure consistent regulation and enforcement (de Almeida et al., 2021; Schmitt, 2022; Bengio et al., 2024). Critics of localized governance argue that citizen bodies may lack the necessary expertise, risk fragmentation, or amplify parochial biases (de Almeida et al., 2021; Murgia, 2024; Shepardson et al., 2024). In contrast, the Right to AI can complement centralized regulation through decentralized governance, enabling community-specific adaptations while maintaining broad standards. Carefully designed conflict-resolution methods can limit local biases and encourage inclusive decision-making.

In sum, we do not suggest that participatory governance alone can resolve all problems of AI oversight. Rather, the Right to AI offers a missing dimension—namely, inclusive, community-driven frameworks that complement both market incentives and centralized regulations.

#### 9. Conclusion

The widespread adoption of AI raises questions about democratic oversight, social justice, and epistemic diversity. This paper proposes a Right to AI, aiming to shift from expert-dominated decision-making toward participatory approaches in which communities influence how AI infrastructure is designed, deployed, and governed. Drawing on Lefebvre's *Right to the City* and Arnstein's ladder of participation, the argument suggests viewing AI as societal infrastructure that requires sustained and inclusive governance.

Case studies were examined to demonstrate the potential and challenges of participatory efforts, highlighting issues such as resource inequalities, value pluralism, and institutional inertia. Recommendations, including structured community assemblies, data trusts, iterative governance, and conflict mediation, were outlined to operationalize the Right to AI. These measures aim to ensure that AI systems reflect community values, address biases, and preserve autonomy.

The paper contends that the Right to AI is an important component of the future AI ecosystems because it addresses the interplay of autonomy, trust, and accountability in technology development. Advancing this right entails collective learning, institutional innovation, and ongoing negotiation of values among diverse constituencies. As AI continues to influence educational curricula, medical diagnostics, economic opportunities, and civic engagement, the need for inclusive governance increases.

Future research can expand the philosophical and practical foundations of the Right to AI, supporting its necessity and details of its implementation. Such work might include a thorough examination of the four-tier ladder model—which conceptualizes the four modes in which participatory AI is practiced—challenging existing frameworks by aligning AI governance with these tiers. Scholars can explore methods to mobilize citizens under the Right to AI umbrella, fostering widespread engagement and ensuring that participatory governance mechanisms are inclusive and representative. Integrating interdisciplinary perspectives from political theory, ethics, and technology studies can also serve to enhance the grounding and reasoning for the Right to AI. Adapting the four-tier ladder to diverse cultural contexts is crucial for scalability and global implementation, while addressing feasibility and funding—determining who pays and how to sustain participatory mechanisms—is equally essential.

By addressing these areas, research can develop the Right to AI as a comprehensive framework that aligns technical advancements with communal interests, promoting inclusivity, transparency, and ethical accountability in AI governance.

## **Impact Statement**

By reframing AI as societal infrastructure and proposing a *Right to AI*, this work highlights both opportunities and challenges for democratizing AI governance. The benefit of participatory governance is that it can address biases in data and model design, empower historically marginalized communities, and foster trust in AI systems. By asserting collective ownership of data, citizen control of model objectives, and localized adaptation, the proposed framework encourages equitable distributions of AI's benefits, aligning technological progress with diverse cultural and ethical perspectives.

However, realizing such a participatory model may face significant hurdles in practice. Communities may lack the educational resources or institutional support to contribute meaningfully, and power asymmetries could lead to tokenistic engagement rather than genuine reform. Additionally, expanding citizen-led decision-making could risk misaligned local biases or fragmented national regulations if not carefully mediated. Nevertheless, by centering the voices of those most affected by AI, the *Right to AI* offers a transformative path that can mitigate systemic biases and strengthen democratic ideals in an increasingly automated world.

#### References

- Adams-Prassl, J., Binns, R., and Kelly-Lyth, A. Directly discriminatory algorithms. *Modern Law Review*, 86(1): 144–175, 2023.
- Almatrafi, O., Johri, A., and Lee, H. A systematic review of ai literacy conceptualization, constructs, and implementation and assessment efforts (2019–2023). *Computers and Education Open*, 6:100173, June 2024. doi: 10.1016/j.caeo.2024.100173. URL https://doi.org/10.1016/j.caeo.2024.100173.
- André, Q., Carmon, Z., Wertenbroch, K., et al. Consumer choice and autonomy in the age of artificial intelligence and big data. *Customer Needs and Solutions*, 5:28–37, March 2018. doi: 10.1007/s40547-017-0085-8. URL https://doi.org/10.1007/s40547-017-0085-8.
- Angwin, J., Larson, J., Mattu, S., and Kirchner, L. Machine bias. In *Ethics of Data and Analytics*. Auerbach Publications, 2022. ISBN 978-1-00-327829-0. Num Pages: 11.
- Anthropic. Collective constitutional ai: Aligning a language model with public input, 2023. URL https://shorturl.at/pVCT1. Technical report.
- Arnstein, S. R. A ladder of citizen participation. *Journal of*

- *the American Institute of Planners*, 35(4):216–224, 1969. doi: https://doi.org/10.1080/01944366908977225.
- Arslan, F. Weapons of math destruction: How big data increases inequality and threatens democracy, by cathy o'neil. *Journal of Information Privacy and Security*, 13(3):157–159, 2017. ISSN 1553-6548. doi: 10.1080/15536548.2017.1357388. URL https://doi.org/10.1080/15536548.2017.1357388. Publisher: Routledge \_eprint: https://doi.org/10.1080/15536548.2017.1357388.
- Avellan, T., Sharma, S., and Turunen, M. Ai for all: defining the what, why, and how of inclusive ai. In *Proceedings of the 23rd International Conference on Academic Mindtrek*, pp. 142–144, 2020. doi: 10.1145/3377290.3377317. URL https://doi.org/10.1145/3377290.3377317.
- Bai, Y., Jones, A., Ndousse, K., Askell, A., Chen, A., Das-Sarma, N., Drain, D., Fort, S., Ganguli, D., Henighan, T., Joseph, N., Kadavath, S., Kernion, J., Conerly, T., El-Showk, S., Elhage, N., Hatfield-Dodds, Z., Hernandez, D., Hume, T., Johnston, S., Kravec, S., Lovitt, L., Nanda, N., Olsson, C., Amodei, D., Brown, T., Clark, J., McCandlish, S., Olah, C., Mann, B., and Kaplan, J. Training a helpful and harmless assistant with reinforcement learning from human feedback, 2022a. URL https://arxiv.org/abs/2204.05862.
- Bai, Y., Kadavath, S., Kundu, S., Askell, A., Kernion, J., Jones, A., Chen, A., Goldie, A., Mirhoseini, A., McKinnon, C., Chen, C., Olsson, C., Olah, C., Hernandez, D., Drain, D., Ganguli, D., Li, D., Tran-Johnson, E., Perez, E., Kerr, J., Mueller, J., Ladish, J., Landau, J., Ndousse, K., Lukosuite, K., Lovitt, L., Sellitto, M., Elhage, N., Schiefer, N., Mercado, N., DasSarma, N., Lasenby, R., Larson, R., Ringer, S., Johnston, S., Kravec, S., Showk, S. E., Fort, S., Lanham, T., Telleen-Lawton, T., Conerly, T., Henighan, T., Hume, T., Bowman, S. R., Hatfield-Dodds, Z., Mann, B., Amodei, D., Joseph, N., McCandlish, S., Brown, T., and Kaplan, J. Constitutional ai: Harmlessness from ai feedback, 2022b. URL https://arxiv.org/abs/2212.08073.
- Bang, Y., Chen, D., Lee, N., and Fung, P. Measuring political bias in large language models: What is said and how it is said, 2024. URL https://arxiv.org/abs/2403.18932.
- Barocas, S. and Selbst, A. D. Big data's disparate impact. *California Law Review*, 104(3):671–732, 2016.
- Baudrillard, J. *The Consumer Society: Myths and Structures*. Sage Publications, London, 1970. Translated by Chris Turner, 1998.

- Beer, D. The social power of algorithms. *Information, Communication & Society*, 20(1):1–13, 2016. doi: 10. 1080/1369118X.2016.1216147. URL https://doi.org/10.1080/1369118X.2016.1216147.
- Bengio, Y., Mindermann, S., Privitera, D., Besiroglu, T., Bommasani, R., Casper, S., Choi, Y., Goldfarb, D., Heidari, H., Khalatbari, L., Longpre, S., Mavroudis, V., Mazeika, M., Ng, K. Y., Okolo, C. T., Raji, D., Skeadas, T., Tramèr, F., Adekanmbi, B., Christiano, P., Dalrymple, D., Dietterich, T. G., Felten, E., Fung, P., Gourinchas, P.-O., Jennings, N., Krause, A., Liang, P., Ludermir, T., Marda, V., Margetts, H., McDermid, J. A., Narayanan, A., Nelson, A., Oh, A., Ramchurn, G., Russell, S., Schaake, M., Song, D., Soto, A., Tiedrich, L., Varoquaux, G., Yao, A., and Zhang, Y.-Q. International scientific report on the safety of advanced ai (interim report), 2024. URL https://arxiv.org/abs/2412.05282.
- Benjamin, R. Race After Technology: Abolitionist Tools for the New Jim Code. Polity, July 9 2019.
- Benkler, Y. *The Wealth of Networks: How Social Production Transforms Markets and Freedom*. Yale University Press, 2006. URL http://www.jstor.org/stable/j.cttlnjknw.
- Benthall, S. and Haynes, B. D. Racial categories in machine learning. In *Proceedings of the Conference on Fairness, Accountability, and Transparency*, pp. 289–298. ACM, 2019. ISBN 978-1-4503-6125-5. doi: 10.1145/3287560.3287575. URL https://dl.acm.org/doi/10.1145/3287560.3287575.
- Berditchevskaia, A., Peach, K., Gill, I., Whittington, O., Malliaraki, E., and Hussein, N. Collective crisis intelligence for frontline humanitarian response, 2021. Technical report.
- Bernstein, D. and Bekheit, A. Ai watch: Global regulatory tracker african union. https://www.whitecase.com/insight-our-thinking/ai-watch-global-/regulatory-tracker-african-union, 2024.
- Birhane, A., Isaac, W., Prabhakaran, V., Díaz, M., Elish, M. C., Gabriel, I., and Mohamed, S. Power to the people? opportunities and challenges for participatory AI. In *Proceedings of Equity and Access in Algorithms, Mechanisms, and Optimization*, pp. 1–8, October 2022. doi: 10.1145/3551624.3555290. URL http://arxiv.org/abs/2209.07572.
- Bohman, J. Public Deliberation: Pluralism, Complexity, and Democracy. MIT Press, 2000.

- Bommasani, R., Hudson, D. A., Adeli, E., Altman, R., Arora, S., von Arx, S., Bernstein, M. S., Bohg, J., Bosselut, A., Brunskill, E., Brynjolfsson, E., Buch, S., Card, D., Castellon, R., Chatterji, N., Chen, A., Creel, K., Davis, J. Q., Demszky, D., Donahue, C., Doumbouya, M., Durmus, E., Ermon, S., Etchemendy, J., Ethayarajh, K., Fei-Fei, L., Finn, C., Gale, T., Gillespie, L., Goel, K., Goodman, N., Grossman, S., Guha, N., Hashimoto, T., Henderson, P., Hewitt, J., Ho, D. E., Hong, J., Hsu, K., Huang, J., Icard, T., Jain, S., Jurafsky, D., Kalluri, P., Karamcheti, S., Keeling, G., Khani, F., Khattab, O., Koh, P. W., Krass, M., Krishna, R., Kuditipudi, R., Kumar, A., Ladhak, F., Lee, M., Lee, T., Leskovec, J., Levent, I., Li, X. L., Li, X., Ma, T., Malik, A., Manning, C. D., Mirchandani, S., Mitchell, E., Munyikwa, Z., Nair, S., Narayan, A., Narayanan, D., Newman, B., Nie, A., Niebles, J. C., Nilforoshan, H., Nyarko, J., Ogut, G., Orr, L., Papadimitriou, I., Park, J. S., Piech, C., Portelance, E., Potts, C., Raghunathan, A., Reich, R., Ren, H., Rong, F., Roohani, Y., Ruiz, C., Ryan, J., Ré, C., Sadigh, D., Sagawa, S., Santhanam, K., Shih, A., Srinivasan, K., Tamkin, A., Taori, R., Thomas, A. W., Tramèr, F., Wang, R. E., Wang, W., Wu, B., Wu, J., Wu, Y., Xie, S. M., Yasunaga, M., You, J., Zaharia, M., Zhang, M., Zhang, T., Zhang, X., Zhang, Y., Zheng, L., Zhou, K., and Liang, P. On the opportunities and risks of foundation models, 2022. URL https://arxiv.org/abs/2108.07258.
- Bondi, E., Xu, L., Acosta-Navas, D., and Killian, J. A. Envisioning communities: A participatory approach towards ai for social good. In *Proceedings of the 2021 AAAI/ACM Conference on AI, Ethics, and Society*, AIES '21, pp. 425–436. ACM, 2021. doi: 10.1145/3461702.3462612. URL http://dx.doi.org/10.1145/3461702.3462612.
- Brayne, S. Big data surveillance: The case of policing. *American Sociological Review*, 82(5):977–1008, 2017. doi: 10.1177/0003122417725865.
- Burrell, J. How the machine 'thinks': Understanding opacity in machine learning algorithms. *Big Data & Society*, 3 (1):1–12, 2016.
- Buruk, B., Ekmekci, P., and Arda, B. A critical perspective on guidelines for responsible and trustworthy artificial intelligence. *Medicine, Health Care and Philosophy*, 23 (3):387–399, 2020. ISSN 1386-7423. doi: 10.1007/s11019-020-09948-1.
- Cachat-Rosset, G. and Klarsfeld, A. Diversity, equity, and inclusion in artificial intelligence: An evaluation of guidelines. *Applied Artificial Intelligence*, 37(1):2176618, 2023. ISSN 0883-9514. doi: 10.1080/08839514.2023.2176618. URL https://doi.org/10.1080/08839514.2023.

- 2176618. Publisher: Taylor & Francis \_eprint: https://doi.org/10.1080/08839514.2023.2176618.
- Candrian, C. and Scherer, A. Rise of the machines: Delegating decisions to autonomous ai. *Computers in Human Behavior*, 134:107308, September 2022. doi: 10.1016/j.chb. 2022.107308. URL https://doi.org/10.1016/j.chb.2022.107308.
- Chen, Z. Ethics and discrimination in artificial intelligenceenabled recruitment practices. *Humanities and Social Sciences Communications*, 10:567, 2023. doi: 10.1057/ s41599-023-02079-x. URL https://doi.org/10. 1057/s41599-023-02079-x.
- Cohen, J. E. Between Truth and Power: The Legal Constructions of Informational Capitalism. Oxford University Press, New York, 2019. doi: 10.1093/oso/9780190246693.001.0001. URL https://doi.org/10.1093/oso/9780190246693.001.0001.
- Cohen, T. and Suzor, N. P. Contesting the public interest in AI governance. *Internet Policy Review*, 13(3), 2024. doi: 10.14763/2024.3.1794. URL https://doi.org/10.14763/2024.3.1794.
- Costanza-Chock, S. Design justice: Community-led practices to build the worlds we need. In *Design Justice*. The MIT Press, 2020.
- Crawford, K. Atlas of AI: Power, Politics, and the Planetary Costs of Artificial Intelligence. Yale University Press, 2021.
- Dahl, R. A. *Polyarchy: Participation and Opposition*. Yale University Press, New Haven, CT, 1971. ISBN 978-0300015652.
- Dastin, J. Amazon scraps secret AI recruiting tool that showed bias against women \*. In *Ethics of Data and Analytics*. Auerbach Publications, 2022. ISBN 978-1-00-327829-0. Num Pages: 4.
- Davern, M., Gunn, L., Whitzman, C., Higgs, C., Giles-Corti, B., Simons, K., et al. Using spatial measures to test a conceptual model of social infrastructure that supports health and wellbeing. *Cities & Health*, 1(2):194–209, 2017. doi: 10.1080/23748834.2018.1443620. URL https://doi.org/10.1080/23748834.2018.1443620.
- de Almeida, P. G. R., dos Santos, C. D., and Farias, J. S. Artificial intelligence regulation: a framework for governance. *Ethics and Information Technology*, 23:505–525, September 2021. doi: 10.1007/s10676-021-09593-z. URL https://doi.org/10.1007/s10676-021-09593-z.

- de Hond, A. A. H., van Buchem, M. M., and Hernandez-Boussard, T. Picture a data scientist: A call to action for increasing diversity, equity, and inclusion in the age of AI. *Journal of the American Medical Informatics Association*, 29(12):2178–2181, November 2022. doi: 10.1093/jamia/ocac156. URL https://academic.oup.com/jamia/article/29/12/2178/6680474.
- de Marcellis-Warin, N., Marty, F., Thelisson, E., et al. Artificial intelligence and consumer manipulations: from consumer's counter algorithms to firm's self-regulation tools. *AI and Ethics*, 2:259–268, May 2022. doi: 10.1007/s43681-022-00149-5. URL https://doi.org/10.1007/s43681-022-00149-5.
- Dewey, J. *The Public and Its Problems*. Henry Holt and Company, 1927.
- Dignam, A. Artificial intelligence, tech corporate governance and the public interest regulatory response. *Cambridge Journal of Regions, Economy and Society*, 13(1): 37–54, March 2020. doi: 10.1093/cjres/rsaa002. URL https://doi.org/10.1093/cjres/rsaa002.
- Eidelson, B. *Discrimination and Disrespect*. Oxford University Press, Oxford, UK, 2015.
- Eitzel, M. V., Solera, J., Mhike Hove, E., Wilson, K. B., Mawere Ndlovu, A., Ndlovu, D., and Veski, A. Assessing the potential of participatory modeling for decolonial restoration of an agro-pastoral system in rural zimbabwe. *Citizen Science: Theory and Practice*, 6(1):2, 2021. doi: 10.5334/cstp.339.
- Eubanks, V. Automating Inequality: How High-Tech Tools Profile, Police, and Punish the Poor. St. Martin's Press, 2018.
- European Union. Regulation (EU) 2024/1689 on Artificial Intelligence (AI Act). https://eur-lex.europa.eu/eli/reg/2024/1689/oj/eng, 2024.
- Femia, J. Complexity and deliberative democracy. *Inquiry*, 39(3-4):359–397, 1996. doi: 10.1080/00201749608602427.
- Fischer, F. Citizens, Experts, and the Environment: The Politics of Local Knowledge. Duke University Press, 2000.
- Floridi, L. Open data, data protection, and group privacy. *Philosophy & Technology*, 27(1):1–3, 2014.
- Foucault, M. *Discipline and Punish: The Birth of the Prison*. Pantheon Books, 1975.
- Fraser, N. From redistribution to recognition? dilemmas of justice in a 'post-socialist' age. *New Left Review*, 212: 68–93, 1995.

- Gebru, T., Morgenstern, J., Vecchione, B., Vaughan, J. W., Wallach, H., III, H. D., and Crawford, K. Datasheets for datasets. *Commun. ACM*, 64(12):86–92, November 2021. ISSN 0001-0782. doi: 10.1145/3458723. URL https://doi.org/10.1145/3458723.
- Gerdes, A. A participatory data-centric approach to AI ethics by design. *Applied Artificial Intelligence*, 36(1):2009222, 2022. doi: 10.1080/08839514.2021. 2009222. URL https://doi.org/10.1080/08839514.2021.2009222.
- Gillespie, T. Custodians of the Internet: Platforms, Content Moderation, and the Hidden Decisions that Shape Social Media. Yale University Press, 2018.
- Goodfellow, I., Bengio, Y., and Courville, A. *Deep Learning*, volume 1. MIT Press, 2016.
- Goodman, E. and Dai, T. Provider payment models for generative ai in healthcare, January 14 2025. URL https://ssrn.com/abstract=5097711. Available at SSRN.
- Gordon, M. L., Lam, M. S., Park, J. S., Patel, K., Hancock, J., Hashimoto, T., and Bernstein, M. S. Jury learning: Integrating dissenting voices into machine learning models. In *CHI Conference on Human Factors in Computing Systems*, CHI '22, pp. 1–19. ACM, April 2022. doi: 10.1145/3491102.3502004. URL http://dx.doi.org/10.1145/3491102.3502004.
- Graham, S. and Marvin, S. Splintering Urbanism: Networked Infrastructures, Technological Mobilities and the Urban Condition. Routledge, 1st edition, 2001. doi: 10.4324/9780203452202. URL https://doi.org/10.4324/9780203452202.
- Grant, D. G., Behrends, J., and Basl, J. What we owe to decision-subjects: Beyond transparency and explanation in automated decision-making. *Philosophical Studies*, 2023. Online First.
- Habermas, J. Between Facts and Norms: Contributions to a Discourse Theory of Law and Democracy. MIT Press, 1996.
- Hadfield, G. K. and Clark, J. Regulatory markets: The future of ai governance, 2023. URL https://arxiv.org/abs/2304.04914.
- Hajkowicz, S., Sanderson, C., Karimi, S., Bratanova, A., and Naughtin, C. Artificial intelligence adoption in the physical sciences, natural sciences, life sciences, social sciences and the arts and humanities: A bibliometric analysis of research publications from 1960-2021. *Technology in Society*, 74, 2023. doi: 10.1016/j.techsoc.2023.102260. URL https://doi.org/10.1016/j.techsoc.2023.102260.

- Harcourt, B. E. Against Prediction: Profiling, Policing, and Punishing in an Actuarial Age. University of Chicago Press, 2007.
- Harvey, D. Rebel Cities: From the Right to the City to the Urban Revolution. Verso, 2012.
- Henley, J. The dutch government resigns over child benefits scandal. *The Guardian*, 2021. URL https://www.theguardian.com/world/2021/jan/15/dutch-government-resigns-over-child/-benefits-scandal.
- Hoffmann, H., Vogt, V., Hauer, M. P., and Zweig, K. Fairness by awareness? on the inclusion of protected features in algorithmic decisions. *Computer Law & Security Review*, 44:105658, 2022. ISSN 02673649. doi: 10.1016/j.clsr.2022.105658. URL https://linkinghub.elsevier.com/retrieve/pii/S0267364922000061.
- Huang, L. T.-L., Papyshev, G., and Wong, J. K. Democratizing value alignment: From authoritarian to democratic AI ethics. *AI and Ethics*, December 2024a. ISSN 2730-5961. doi: 10.1007/s43681-024-00624-1. URL https://doi.org/10.1007/s43681-024-00624-1.
- Huang, S., Siddarth, D., Lovitt, L., Liao, T. I., Durmus, E., Tamkin, A., and Ganguli, D. Collective constitutional ai: Aligning a language model with public input. In *The 2024 ACM Conference on Fairness, Accountability, and Transparency (FAccT '24)*, pp. 23 pages, Rio de Janeiro, Brazil, June 2024b. ACM. doi: 10. 1145/3630106.3658979. URL https://doi.org/10.1145/3630106.3658979.
- Jacobs, J. The death and life of great american cities. In *Random House*, New York, NY, 1961.
- Jin, F. and Zhang, X. Artificial intelligence or human: When and why consumers prefer AI recommendations. *Information Technology & People*, 38(1):279–303, 2025. doi: 10.1108/ITP-01-2023-0022. URL https://doi.org/10.1108/ITP-01-2023-0022.
- Jin, Z., Kleiman-Weiner, M., Piatti, G., Levine, S., Liu, J., Gonzalez, F., Ortu, F., Strausz, A., Sachan, M., Mihalcea, R., Choi, Y., and Schölkopf, B. Language model alignment in multilingual trolley problems, 2024. URL https://arxiv.org/abs/2407.02273.
- Jobin, A., Ienca, M., and Vayena, E. The global landscape of AI ethics guidelines. *Nature Machine Intelligence*, 1:389–399, September 2019. doi: 10.1038/ s42256-019-0088-2. URL https://doi.org/10. 1038/s42256-019-0088-2.

- Judge, B., Nitzberg, M., and Russell, S. When code isn't law: Rethinking regulation for artificial intelligence. *Policy and Society*, 2024. doi: 10.1093/polsoc/ puae020. URL https://doi.org/10.1093/ polsoc/puae020.
- Kalluri, P. Don't ask if artificial intelligence is good or fair, ask how it shifts power. *Nature*, 583(7815):169, July 2020. doi: 10.1038/d41586-020-02003-2.
- Kaminski, M. E. The right to explanation, explained. Berkeley Technology Law Journal, 34(1), 2019. doi: 10.2139/ssrn.3196985. URL https://ssrn.com/abstract=3196985. U of Colorado Law Legal Studies Research Paper No. 18-24.
- Kaminski, M. E. and Urban, J. M. The right to contest ai. *Columbia Law Review*, 121(7):1957–2048, 2021. URL https://www.jstor.org/stable/27083420.
- Kerry, C. F., Meltzer, J. P., Renda, A., and Wyckoff, A. W. Network architecture for global ai policy, 2025. URL https://www.brookings.edu/articles/network-architecture-/for-global-ai-policy/. Brookings Institution, February 10.
- Kirk, H. R., Whitefield, A., Röttger, P., Bean, A., Margatina, K., Ciro, J., Mosquera, R., Bartolo, M., Williams, A., He, H., Vidgen, B., and Hale, S. A. The prism alignment dataset: What participatory, representative and individualised human feedback reveals about the subjective and multicultural alignment of large language models, 2024. URL https://arxiv.org/abs/2404.16019.
- Kitchin, R. Thinking critically about and researching algorithms. *Information, Communication & Society*, 20(1):14–29, 2016. doi: 10.1080/1369118X.2016. 1154087. URL https://doi.org/10.1080/1369118X.2016.1154087.
- Kitchin, R. Urban data power: Capitalism, governance, ethics, and justice. *Data Power in Action*, 21, 2023.
- Kleinberg, J., Ludwig, J., Mullainathan, S., and Sunstein, C. Discrimination in the age of algorithms. *Journal of Legal Analysis*, 10:113–174, 2019.
- Koseki, S., Jameson, S., Farnadi, G., Denis, J.-L., Régis, C., Rolnick, D., Lahoud, C., Pienaar, J., Thung, I., Owigar, J., Sommer, K., Nkuidje, L., Pennanen-Rebeiro-Hargrave, P., Westerberg, P., Sietchiping, R., Yousry, S., Prud'homme, B., Landry, R., Sagar, A. S., and L'Archevêque, S. AI and cities: Risk, applications and governance. Technical report, UN Habitat, 2022.

- Kukutai, T. and Taylor, J. (eds.). *Indigenous Data Sovereignty: Toward an Agenda*. Number 38 in Research Monograph. ANU Press, Canberra, Australia, 2016. ISBN 9781760460303. URL https://press.anu.edu.au. Also available as an ebook: ISBN 9781760460310.
- Laitinen, A. and Sahlgren, O. Ai systems and respect for human autonomy. *Frontiers in Artificial Intelligence*, 4: 1–14, 2021.
- Larson, J., Mattu, S., Kirchner, L., and Angwin, J. How we analyzed the compas recidivism algorithm. *ProPublica*, 2016. URL https://www.propublica.org/article/how-we-analyzed-/the-compas-recidivism-algorithm.
- Larsson, S. On the governance of artificial intelligence through ethics guidelines. *Asian Journal of Law and Society*, 7(3):437–451, 2020. ISSN 2052-9015. doi: 10.1017/als.2020.19.
- Lazar, S. Frontier ai ethics: Anticipating and evaluating the societal impacts of language model agents, 2024. URL https://arxiv.org/abs/2404.06750.
- Lee, M. K., Kusbit, D., Kahng, A., Kim, J. T., Yuan, X., Chan, A., See, D., Noothigattu, R., Lee, S., Psomas, A., and Procaccia, A. D. Webuildai: Participatory framework for algorithmic governance. *Proc. ACM Hum.-Comput. Interact.*, 3(CSCW), November 2019. doi: 10.1145/3359283. URL https://doi.org/10.1145/3359283.
- Lee, M. K., Nigam, I., Zhang, A., Afriyie, J., Qin, Z., and Gao, S. Participatory algorithmic management: Elicitation methods for worker well-being models. In *Proceedings of the 2021 AAAI/ACM Conference on AI, Ethics, and Society*, AIES '21, pp. 715–726, New York, NY, USA, 2021. Association for Computing Machinery. ISBN 9781450384735. doi: 10.1145/3461702.3462628. URL https://doi.org/10.1145/3461702.3462628.
- Lefebvre, H. *Le droit à la ville (The Right to the City)*. Anthropos, Paris, France, 1968.
- Leike, J., Krueger, D., Everitt, T., Martic, M., Maini, V., and Legg, S. Scalable agent alignment via reward modeling: a research direction, 2018. URL https://arxiv.org/abs/1811.07871.
- Lepri, B., Oliver, N., Letouzé, E., Pentland, A., and Vinck, P. Fair, transparent, and accountable algorithmic decision-making processes: The premise, the proposed solutions, and the open challenges. *Philosophy & Technology*, 31(4):611–627, December 2018. ISSN 2210-5433, 2210-5441. doi: 10.1007/s13347-017-0279-x.

- URL http://link.springer.com/10.1007/ s13347-017-0279-x.
- Lewis, J. E., Abdilla, A., Arista, N., Baker, K., Benesiinaabandan, S., Brown, M., Cheung, M., Coleman, M., Cordes, A., Davison, J., Duncan, K., Garzon, S., Harrell, D. F., Jones, P.-L., Kealiikanakaoleohaililani, K., Kelleher, M., Kite, S., Lagon, O., Leigh, J., and Whaanga, H. Indigenous protocol and artificial intelligence position paper. Technical report, Indigenous Protocol and Artificial Intelligence Working Group and the Canadian Institute for Advanced Research, 2020. URL https://doi.org/10.11573/spectrum.library.concordia.ca.00986506.
- Loi, M. and Christen, M. Two concepts of group privacy. *Philosophy & Technology*, 33:207–224, 2020.
- Mackenzie, C. Responding to the agency dilemma: Autonomy, adaptive preferences, and internalized oppression. *Personal Autonomy and Social Oppression*, pp. 48–67, 2015.
- Madden, D. and Marcuse, P. *In Defense of Housing: The Politics of Crisis.* Verso, 2017.
- Marmor, A. What is the right to privacy. *Philosophy & Public Affairs*, 43(1):3–26, 2015.
- Metz, C. and Grant, N. Google unveils a.i. agent that can use websites on its own, 2024. ISSN 0362-4331. URL https://www.nytimes.com/2024/12/11/technology/google-ai-agent-gemini.html.
- Mikalef, P., Conboy, K., Lundström, J. E., and Popovič, A. Thinking responsibly about responsible AI and 'the dark side' of AI. *European Journal of Information Systems*, 31(3):257–268, 2022. doi: 10.1080/0960085X.2022.2026621. URL https://doi.org/10.1080/0960085X.2022.2026621.
- Mill, J. S. *Utilitarianism*. Parker, Son & Bourn, West Strand, London, 1 edition, 1863.
- Miller, T. Explanation in artificial intelligence: Insights from the social sciences. *Artificial Intelligence*, 267:1–38, 2019. ISSN 0004-3702. doi: 10.1016/j.artint.2018.07. 007.
- Mishra, A. Ai alignment and social choice: Fundamental limitations and policy implications. *SSRN Electronic Journal*, October 18 2023. doi: 10.2139/ssrn.4605509. URL https://ssrn.com/abstract=4605509. Available at SSRN.

- Morison, J. Towards a democratic singularity? algorithmic governmentality, the eradication of politics, and the possibility of resistance. In Deakin, S. and Markou, C. (eds.), *Is Law Computable? : Critical Perspectives on Law & Artificial Intelligence.* Hart Publishing, 2020.
- Moulin, H. Fair Division and Collective Welfare. MIT Press, Cambridge, MA, 2004.
- Murgia, M. Signal's meredith whittaker: 'i see AI as born out of surveillance'. *Financial Times*, September 27 2024. URL https://www.ft.com/content/799b4fcf-2cf7-41d2-81b4-10d9ecdd83f6.
- Murray, C. and Frijters, P. Game of mates: How favours bleed the nation. *Publicious Pty Ltd*, 2017.
- Mushkani, R., Berard, H., Ammar, T., Chatonnier, C., and Koseki, S. Co-producing ai: Toward an augmented, participatory lifecycle, 2025a. URL https://arxiv.org/abs/2508.00138.
- Mushkani, R., Nayak, S., Berard, H., Cohen, A., Koseki, S., and Bertrand, H. Livs: A pluralistic alignment dataset for inclusive public spaces. In *Proceedings of the 42nd International Conference on Machine Learning (ICML 2025)*. Proceedings of Machine Learning Research, 2025b. URL https://doi.org/10.48550/arXiv.2503.01894.
- Mühlhoff, R. Predictive privacy: Collective data protection in the context of artificial intelligence and big data. *Big Data & Society*, pp. 1–14, 2023.
- Nayak, S., Mushkani, R., Berard, H., Cohen, A., Koseki, S., and Bertrand, H. MID-space: Aligning diverse communities' needs to inclusive public spaces. In *Pluralistic Alignment Workshop at NeurIPS 2024*, 2024. URL https://openreview.net/forum?id=kyfkMRT4Ao.
- Nekoto, W., Marivate, V., Matsila, T., Fasubaa, T., Fagbohungbe, T., Akinola, S. O., Muhammad, S., Kabenamualu, S. K., Osei, S., Sackey, F., Niyongabo, R. A., Macharm, R., Ogayo, P., Ahia, O., Berhe, M. M., Adeyemi, M., Mokgesi-Selinga, M., Okegbemi, L., Martinus, L., Tajudeen, K., Degila, K., Ogueji, K., Siminyu, K., Kreutzer, J., Webster, J., Ali, J. T., Abbott, J., Orife, I., Ezeani, I., Dangana, I. A., Kamper, H., Elsahar, H., Duru, G., Kioko, G., Espoir, M., van Biljon, E., Whitenack, D., Onyefuluchi, C., Emezue, C. C., Dossou, B. F. P., Sibanda, B., Bassey, B., Olabiyi, A., Ramkilowan, A., Öktem, A., Akinfaderin, A., and Bashir, A. Participatory research for low-resourced machine translation: A case study in african languages. In Findings of the Association for Computational Linguistics: EMNLP 2020, pp. 2144–2160. Association for Computational Linguistics, November 2020. doi: 10.18653/v1/2020.findings-emnlp.

- 195. URL https://aclanthology.org/2020.findings-emnlp.195/.
- Ng, A. Why AI is the new electricity, March 10 2017. URL https://www.gsb.stanford.edu/insights/andrew-ng-why-ai-new-electricity.
- North, D. C. *Institutions, Institutional Change and Economic Performance*. Cambridge University Press, 1990.
- Nucera, S. and Onuoha, S. *A People's Guide to AI*. Research Action Design and Our Data Bodies Project, 2018.
- Ooi, K. B., Tan, G. W. H., Al-Emran, M., Al-Sharafi, M. A., Capatina, A., Chakraborty, A., Wong, L. W., and et al. The potential of generative artificial intelligence across disciplines: Perspectives and future directions. *Journal of Computer Information Systems*, 65(1):76–107, 2023. doi: 10.1080/08874417.2023.2261010. URL https://doi.org/10.1080/08874417.2023.2261010.
- OpenAI and SoftBank. Announcing the stargate project, 2025. URL https://openai.com/index/announcing-the-stargate-project/. Retrieved January 25, 2025.
- Ostrom, E. Governing the Commons: The Evolution of Institutions for Collective Action. Cambridge University Press, 1990.
- Ostrom, E. Crossing the great divide: Coproduction, synergy, and development. World Development, 24(6):1073-1087, 1996. ISSN 0305-750X. doi: https://doi.org/10.1016/0305-750X(96)00023-X. URL https://www.sciencedirect.com/science/article/pii/0305750X9600023X.
- Ostrom, E. *Understanding Institutional Diversity*. Princeton University Press, 2009.
- Plantin, J.-C., Lagoze, C., Edwards, P. N., and Sandvig, C. Infrastructure studies meet platform studies in the age of google and facebook. *New Media & Society*, 20(1): 293–310, 2018. doi: 10.1177/1461444816661553.
- Purcell, M. Possible Worlds: Henri Lefebvre and the Right to the City. Routledge, 2014.
- Queerinai, O. O., Ovalle, A., Subramonian, A., Singh, A.,
  Voelcker, C., Sutherland, D. J., Locatelli, D., Breznik,
  E., Klubicka, F., Yuan, H., J, H., Zhang, H., Shriram, J., Lehman, K., Soldaini, L., Sap, M., Deisenroth, M. P., Pacheco, M. L., Ryskina, M., Mundt, M.,
  Agarwal, M., Mclean, N., Xu, P., Pranav, A., Korpan,
  R., Ray, R., Mathew, S., Arora, S., John, S., Anand,
  T., Agrawal, V., Agnew, W., Long, Y., Wang, Z. J.,
  Talat, Z., Ghosh, A., Dennler, N., Noseworthy, M.,

- Jha, S., Baylor, E., Joshi, A., Bilenko, N. Y., Mcnamara, A., Gontijo-Lopes, R., Markham, A., Dong, E., Kay, J., Saraswat, M., Vytla, N., and Stark, L. Queer in ai: A case study in community-led participatory ai. In *Proceedings of the 2023 ACM Conference on Fairness, Accountability, and Transparency*, FAccT '23, pp. 1882–1895, New York, NY, USA, 2023. Association for Computing Machinery. ISBN 9798400701924. doi: 10.1145/3593013.3594134. URL https://doi.org/10.1145/3593013.3594134.
- Radu, R. Steering the governance of artificial intelligence: national strategies in perspective. *Policy and Society*, 40 (2):178–193, June 2021. doi: 10.1080/14494035.2021. 1929728.
- Ray, P. P. Benchmarking, ethical alignment, and evaluation framework for conversational ai: Advancing responsible development of chatgpt. *BenchCouncil Transactions on Benchmarks, Standards and Evaluations*, 3(3):100136, 2023. ISSN 2772-4859. doi: https://doi.org/10.1016/j.tbench.2023.100136. URL https://www.sciencedirect.com/science/article/pii/S2772485923000534.
- Raz, J. Engaging Reason: On Values and Agency. Oxford University Press, Oxford, UK, 1999.
- Reisman, D., Schultz, J., Crawford, K., and Whittaker, M. Algorithmic impact assessments report: A practical framework for public agency accountability. AI Now Institute, April 2018. URL https://ainowinstitute.org/reports.html.
- Rubel, A., Castro, C., and Pham, A. Algorithms, agency, and respect for persons. *Social Theory and Practice*, 46 (3), 2020.
- Rumbold, B. and Wilson, J. Privacy rights and public information. *Journal of Political Philosophy*, 27(1):3–25, 2019.
- Saheb, T. and Saheb, T. Mapping ethical artificial intelligence policy landscape: A mixed method analysis. *Science and Engineering Ethics*, 30:9, March 2024. doi: 10.1007/s11948-024-00472-6. URL https://doi.org/10.1007/s11948-024-00472-6.
- Schiff, D., Borenstein, J., Biddle, J., and Laas, K. Ai ethics in the public, private, and ngo sectors: A review of a global document collection. *IEEE Transactions on Technology and Society*, 2(1):31–42, 2021. doi: 10.1109/TTS.2021.3052127.
- Schmitt, L. Mapping global ai governance: a nascent regime in a fragmented landscape. *AI* and *Ethics*, 2:303–314, May 2022. doi: 10.1007/

- s43681-021-00083-y. URL https://doi.org/10. 1007/s43681-021-00083-y.
- Shepardson, D., Tong, A., and Tong, A. California governor vetoes contentious AI safety bill. *Reuters*, September 30 2024. URL https://tinyurl.com/46tb57ad.
- Sieber, R., Brandusescu, A., Adu-Daako, A., and Sangiambut, S. Who are the publics engaging in ai? *Public Understanding of Science*, 33(5):634–653, 2024a. doi: 10.1177/09636625231219853. URL https://doi.org/10.1177/09636625231219853.
- Sieber, R., Brandusescu, A., Sangiambut, S., and Adu-Daako, A. What is civic participation in artificial intelligence? *Environment and Planning B: Urban Analytics and City Science*, 0(0), 2024b. doi: 10.1177/23998083241296200. URL https://doi.org/10.1177/23998083241296200.
- Sloane, M., Moss, E., Awomolo, O., and Forlano, L. Participation is not a design fix for machine learning. In ACM International Conference Proceeding Series, 2022. ISBN 978-1-4503-9477-2. doi: 10.1145/3551624.3555285.
- Sorensen, T., Moore, J., Fisher, J., Gordon, M., Mireshghallah, N., Rytting, C. M., Ye, A., Jiang, L., Lu, X., Dziri, N., Althoff, T., and Choi, Y. Position: a roadmap to pluralistic alignment. In *Proceedings of the 41st International Conference on Machine Learning*, ICML'24. JMLR.org, 2024.
- Stoljar, N. Autonomy and adaptive preference formation. *Autonomy, Oppression, and Gender*, pp. 227–252, 2014.
- Sun, H. Reinvigorating the human right to technology. *Michigan Journal of International Law*, 41(2):279, 2020. URL https://repository.law.umich.edu/mjil/vol41/iss2/3.
- Taeihagh, A. Governance of artificial intelligence. *Policy and Society*, 40(2):137–157, 2021. doi: 10.1080/14494035.2021.1928377.
- Tasioulas, J. The rule of algorithm and the rule of law. *Vienna Lectures on Legal Philosophy*, pp. 1–19, 2023.
- Tenove, C., Buffie, J., McKay, S., and Moscrop, D. Digital threats to democratic elections: How foreign actors use digital techniques to undermine democracy. Research Report, Centre for the Study of Democratic Institutions, University of British Columbia, 2018. URL https://ssrn.com/abstract=3235819.
- The White House. Removing Barriers to American Leadership in Artificial Intelligence. https://www.whitehouse.gov/presidential-actions/2025/01/

- removing-barriers-to-american-/ leadership-in-artificial-intelligence/, 2025.
- Tilmes, N. Disability, fairness, and algorithmic bias in AI recruitment. *Ethics and Information Technology*, 24(2), 2022. ISSN 1388-1957. doi: 10.1007/s10676-022-09633-2.
- Turri, J., Alfano, M., and Greco, J. Virtue epistemology. In Zalta, E. N. (ed.), *The Stanford Encyclopedia of Philosophy (Winter 2021)*. Metaphysics Research Lab, Stanford University, 2021. URL https://plato.stanford.edu/archives/win2021/entries/epistemology-virtue/.
- Ulnicane, I. Governance fix? power and politics in controversies about governing generative AI. *Policy and Society*, 2024. doi: 10.1093/polsoc/puae022. URL https://doi.org/10.1093/polsoc/puae022.
- Vredenburgh, K. The right to explanation. *Journal of Political Philosophy*, 30(2):209–229, 2022.
- Wachter, S. and Mittelstadt, B. A right to reasonable inferences: Re-thinking data protection law in the age of big data and ai. *Columbia Business Law Review*, 2019(2): 1–130, 2019.
- Wenar, L. Rights. In Zalta, E. N. and Nodelman, U. (eds.), The Stanford Encyclopedia of Philosophy (Spring 2023 Edition). Metaphysics Research Lab, Stanford University, 2023. URL https://plato.stanford.edu/archives/spr2023/entries/rights/.
- Williams, S., Beery, S., Conley, C., Evans, M. L., Garces, S., Gordon, E., Jacob, N., and Medina, E. People-Powered Gen AI: Collaborating with Generative AI for Civic Engagement. *An MIT Exploration of Generative AI*, sep 3 2024. https://mit-genai.pubpub.org/pub/6uejzuox.
- Zaidan, E. and Ibrahim, I. A. Ai governance in a complex and rapidly changing regulatory landscape: A global perspective. *Humanities and Social Sciences Communications*, 11:1121, September 2024. doi: 10.1057/s41599-024-03560-x. URL https://doi.org/10.1057/s41599-024-03560-x.
- Zhang, D., Finckenberg-Broman, P., Hoang, T., et al. Right to be forgotten in the era of large language models: Implications, challenges, and solutions. *AI Ethics*, 2024. doi: 10.1007/s43681-024-00573-9. URL https://doi.org/10.1007/s43681-024-00573-9. Published 10 September 2024; Accepted 21 August 2024; Received 10 June 2024.

Zhang, K. and Aslan, A. B. Ai technologies for education: Recent research & future directions. *Computers and Education: Artificial Intelligence*, 2:100025, 2021. ISSN 2666-920X. doi: https://doi.org/10.1016/j.caeai.2021.100025. URL https://www.sciencedirect.com/science/article/pii/S2666920X21000199.

Zhang, R., Li, H.-W., Qian, X.-Y., Jiang, W.-B., and Chen, H.-X. On large language models safety, security, and privacy: A survey. *Journal of Electronic Science and Technology*, pp. 100301, 2025. ISSN 1674-862X. doi: https://doi.org/10.1016/j.jnlest.2025.100301. URL https://www.sciencedirect.com/science/article/pii/S1674862X25000023.

Zhou, Z., Li, Z., Zhang, Y., and Sun, L. Transparent-ai blueprint: Developing a conceptual tool to support the design of transparent ai agents. *International Journal of Human–Computer Interaction*, 38(18–20):1846–1873, 2022. doi: 10.1080/10447318.2022.2093773. URL https://doi.org/10.1080/10447318.2022.2093773.

Zhou, Z., Liu, J., Dong, Z., Liu, J., Yang, C., Ouyang, W., and Qiao, Y. Emulated disalignment: Safety alignment for large language models may backfire! In Ku, L.-W., Martins, A., and Srikumar, V. (eds.), *Proceedings of the 62nd Annual Meeting of the Association for Computational Linguistics (Volume 1: Long Papers)*, pp. 15810–15830, Bangkok, Thailand, August 2024. Association for Computational Linguistics. doi: 10.18653/v1/2024.acl-long.842. URL https://aclanthology.org/2024.acl-long.842/.

Zicari, R. V., Brusseau, J., Blomberg, S. N., Christensen, H. C., Coffee, M., Ganapini, M. B., Gerke, S., Gilbert, T. K., Hickman, E., Hildt, E., Holm, S., Kühne, U., Madai, V. I., Osika, W., Spezzatti, A., Schnebel, E., Tithi, J. J., Vetter, D., Westerlund, M., Wurth, R., Amann, J., Antun, V., Beretta, V., Bruneault, F., Campano, E., Düdder, B., Gallucci, A., Goffi, E., Haase, C. B., Hagendorff, T., Kringen, P., Möslein, F., Ottenheimer, D., Ozols, M., Palazzani, L., Petrin, M., Tafur, K., Tørresen, J., Volland, H., and Kararigas, G. On assessing trustworthy ai in healthcare. machine learning as a supportive tool to recognize cardiac arrest in emergency calls. Frontiers in Human Dynamics, 3, 2021. doi: 10.3389/fhumd.2021.673104. https://www.frontiersin.org/journals/ human-dynamics/articles/10.3389/fhumd. 2021.673104.

### **Appendix**

· Consolidated Overview

- A Governance Right
- B Implementation Path
- C Generative Agents
- · D Power & Data
- E Ethical Grounds
- · F Hidden Choices

#### **Consolidated Overview**

Contemporary discourse on AI governance encompasses a broad spectrum of policy proposals, ethical guidelines, and technical approaches aimed at aligning AI systems with societal values (Mishra, 2023; Zaidan & Ibrahim, 2024; Sorensen et al., 2024). Major institutions such as the OECD and the European Union have introduced frameworks for responsible AI development, often emphasizing fairness, accountability, and transparency (Saheb & Saheb, 2024; Zhang et al., 2025). However, these initiatives vary widely in design and enforceability across different regions.

For instance, while the European Union's proposed AI Act imposes legally binding obligations for high-risk AI systems (European Union, 2024), other jurisdictions frequently rely on voluntary guidelines or market-driven standards (Kerry et al., 2025). In the United States, the now-rescinded White House Blueprint for an AI Bill of Rights was primarily composed of non-binding principles, and no comprehensive replacement has emerged (The White House, 2025). In Asia, countries such as Singapore emphasize industry consultation and codes of practice, whereas Japan's guidelines seek to harmonize technological innovation with broader societal goals (Kerry et al., 2025).

Several developing countries have drafted national AI strategies or joined initiatives like the African Union's Continental Strategy for AI, but often face structural and financial barriers that constrain robust public participation (Bernstein & Bekheit, 2024). Overall, these disparate regulatory models illustrate an ongoing tension between top-down or expertled approaches and a growing demand for more inclusive governance. The Right to AI advanced in this paper seeks to bridge these gaps by advocating participatory frameworks, human-centered design, and collective data ownership, thus complementing rather than merely supplanting existing governance structures across diverse legal and cultural contexts.

This paper's core argument can be summarized in three steps: first, that AI increasingly functions as a form of societal infrastructure; second, that individuals and communities hold a right to help shape and govern the infrastructure that affects their lives (Benkler, 2006); and third, that therefore a "Right to AI" naturally follows. As elaborated in the main text, Section 3 advances the conceptual

framing of AI as infrastructure, while Section 4 outlines four normative grounds—ethical, political, epistemic, and institutional—that justify this right.

In brief, we argue that:

- to protect democratic legitimacy, impacted communities must have meaningful decision-making power over AI design;
- social justice demands attention to marginalized voices;
- epistemic autonomy requires safeguards against narrow or monolithic knowledge curation by AI;
- 4. data, which is essential for AI, is socially produced and thus merits communal oversight.

In grounding these claims, our framework views AI as not merely a product of private innovation but an infrastructure of public consequence, and it aligns with global calls for more inclusive and participatory technological governance (Crawford, 2021).

One might wonder if the Right to AI merely collapses into a broader right to infrastructure. While it does share foundational principles with other governance rights over public goods, AI's particular characteristics—such as algorithmic opacity, global data reliance, and evolving automation capabilities—warrant a dedicated framework (Cohen, 2019). The Right to AI thus refines a general right to shape infrastructure, specifying the necessary mechanisms to address the unique ethical, technical, and political complexities posed by AI.

Some scholars and industry leaders dispute the premise that AI is or should be treated as public infrastructure, arguing that AI's intangibility sets it apart from utilities like water or electricity. Others emphasize market-led solutions, suggesting that competition will naturally encourage responsible AI. However, the infrastructural viewpoint spotlights the breadth and depth of AI's societal reach, from healthcare to education to political discourse (Plantin et al., 2018). This, we contend, justifies a governance paradigm akin to that of publicly regulated utilities. Treating AI as infrastructure thus reframes oversight as a collective undertaking, rather than a question of consumer choice or proprietary rights alone.

#### A. Governance Right

The Right to AI can be understood as a *governance right*, emphasizing *policy*, *procedural justice*, and *institutional design* (Habermas, 1996; Ostrom, 1996). Rather than relying on market mechanisms or top-down state control, gover-

nance rights establish frameworks through which *individuals and communities* can co-determine AI systems' objectives and oversight structures. This perspective draws on democratic traditions recognizing the capacity of the public to influence technological developments that shape collective well-being (Sun, 2020; Wenar, 2023).

In this framework, the Right to AI moves beyond a *privilege right*—which might only allow people to use a given technology—to a *power right*, which grants communities the authority to *reshape* AI systems (Sun, 2020; Wenar, 2023). While intellectual property laws may protect patents or licenses, the broader direction, governance, and deployment of AI can be subject to public deliberation. Examples include local AI assemblies, public audits, and cooperative data stewardship, each aiming to reconcile private ownership with communal oversight (Lee et al., 2021; Schiff et al., 2021).

## **B.** Implementation Path

- (a) Empirical Evidence from Participatory AI Initiatives such as *WeBuildAI* (Lee et al., 2019) and *MID-Space* (Nayak et al., 2024) suggest that community participation can align algorithmic outputs with local values. These projects have found that when participants understand how and why certain data are used, they are more inclined to trust and engage with AI tools. However, repeated consultations without tangible outcomes may cause *participation fatigue* (Arnstein, 1969).
- **(b) Evaluation of Participatory Models** Comparative analyses of participatory and non-participatory AI systems could measure outcomes such as transparency, fairness, and community trust (Huang et al., 2024b; Kirk et al., 2024). Involving domain experts, local knowledge holders, and impacted communities may help refine evaluation criteria and metrics (Birhane et al., 2022; Sloane et al., 2022).
- **(c) Technical Approaches** Methods like *Reinforcement Learning from Human Feedback* (RLHF) (Bai et al., 2022a) and *participatory fine-tuning* (Kirk et al., 2024) enable stakeholder input on model behaviors. Balancing diverse viewpoints in these processes can be challenging but may be facilitated by transparent data pipelines and iterative design cycles (Anthropic, 2023; Birhane et al., 2022).
- (d) Scalability and Institutional Barriers Scaling participatory approaches to national or international contexts is complex. Bureaucratic structures and profit-driven goals sometimes dilute community-driven decision-making (Huang et al., 2024a). Hybrid frameworks that combine local autonomy with standardized guidelines might help retain the participatory ethos (Sieber et al., 2024a).

**(e) Applications Across System Types** Participatory governance can apply to various AI domains but may face context-specific constraints. For instance, specialized knowledge or resource limitations can limit who can engage. Below are select examples:

(e.1) Education and Healthcare End-users often have immediate stakes in these areas (Zicari et al., 2021; Zhang & Aslan, 2021). Collaborative tools have been piloted to identify biases in diagnostic algorithms (Zicari et al., 2021), though sustained adoption can require institutional support and specialized expertise.

(e.2) **Urban Planning** Urban planning regularly involves public input, though execution can vary (Jacobs, 1961; Sieber et al., 2024b). Projects like *MID-Space* used iterative community annotation to inform planning tools (Nayak et al., 2024), revealing how structured feedback loops might help integrate diverse local needs (Mushkani et al., 2025b).

(e.3) Software Development Open-source and agile methods stress iterative engagement. *WeBuildAI* (Lee et al., 2019) involved workshops where participants shaped algorithmic governance. Transparent norms and distributed authority appeared pivotal to maintaining motivation and commitment.

#### **(f) Future Research** Further areas of inquiry include:

- Data Practices and Local Expertise: Co-created annotation and Indigenous knowledge integration may enhance system credibility (Eitzel et al., 2021; Nayak et al., 2024).
- Longitudinal Studies: Investigating how participation evolves over time, focusing on trust-building and avoiding participation fatigue (Sloane et al., 2022).
- Sustainability: Allocating resources to ensure consistent engagement and demonstrate visible influence on policy or system outputs (Ulnicane, 2024).

## **C.** Generative Agents

Recent advances in large language models and other generative systems allow for large-scale content creation across text, images, or interactive dialogues (Bommasani et al., 2022; Lazar, 2024). Several factors may benefit from participatory governance:

**Pluralistic Alignment** Generative AI can reinforce majority perspectives if minority viewpoints are underrepresented in the training data (Bai et al., 2022a; Huang et al., 2024a; Sorensen et al., 2024). Approaches like RLHF may not fully capture diverse views, prompting research on methods such

as Overton pluralism or jury-based alignment (Sorensen et al., 2024). These efforts could mitigate homogenization of perspectives and enhance equitable representation (Huang et al., 2024b).

**Risk of Amplified Disinformation** Generative models may facilitate the rapid creation of misleading or harmful content (Tenove et al., 2018; Zhang et al., 2025). While community monitoring and co-governance can assist in mitigating such content, institutional safeguards and digital literacy programs may be crucial for broader resilience (Zhou et al., 2024).

**Data Transparency and Ownership** Large-scale data scraping is central to many generative systems (Kukutai & Taylor, 2016; Miller, 2019; Kitchin, 2023). A Right to AI perspective could motivate community-based decisions about data collection, retention, and licensing (Kukutai & Taylor, 2016).

Algorithmic Profiling and Manipulation Adaptive agents can generate detailed user profiles by monitoring interactions, raising concerns over targeted manipulation or preferential targeting (Leike et al., 2018; Ray, 2023; Kitchin, 2023). Participatory audits and interpretability tools might help users and regulators detect problematic patterns, but effective governance likely requires ongoing transparency about model objectives (Birhane et al., 2022; Huang et al., 2024a).

#### D. Power & Data

A Foucauldian perspective suggests that *marginalization* and exclusion often result from institutional power relations and discursive frameworks that limit whose voices are considered legitimate (Foucault, 1975). In AI, control over design, deployment, and data policies can be concentrated among corporations or governmental actors. Changing these power structures may require new or revised institutional processes that invite broader participation.

Article 27 of the UDHR and the Right to Science Article 27 of the *Universal Declaration of Human Rights (1948)* states that everyone should share in "scientific advancement and its benefits." Contemporary interpretations extend this to digital and technological domains (Sun, 2020; Wenar, 2023). However, public accessibility of data does not necessarily translate to equitable involvement in systems built upon it. Proprietary protections can confine tangible benefits to a limited number of stakeholders.

**Data Enclosure** Some private actors train AI models on publicly available data and then restrict or monetize the results, a process sometimes referred to as *data enclosure* 

(Beer, 2016; Kitchin, 2016). Critics argue that in fields such as healthcare and policing, models used without public oversight can exacerbate social inequalities (Eubanks, 2018; Avellan et al., 2020). The Right to AI positions communities to scrutinize and influence such models, aiming to prevent the privatization of communal knowledge.

#### E. Ethical Grounds

Respect for Moral Agency A fundamental argument for the Right to AI is grounded in respect for moral agency. AI systems significantly influence people's lives, making decisions on employment, healthcare, policing, and education (Eidelson, 2015; Laitinen & Sahlgren, 2021; Mackenzie, 2015). Ensuring that individuals have a role in shaping these systems aligns with principles of autonomy and self-determination (Stoljar, 2014; Tasioulas, 2023). Without participatory engagement, AI risks reducing individuals to passive subjects of algorithmic governance rather than active contributors to its development.

Control Over Personal Information AI-based decisions often rely on personal data, prompting questions about privacy, consent, and user control (Marmor, 2015; Wachter & Mittelstadt, 2019). Mechanisms embedded in the Right to AI could clarify data handling processes and reduce unwarranted intrusions (Rumbold & Wilson, 2019; Floridi, 2014).

Mitigating Intrusion and Anonymization Risks AI's ability to infer personal attributes, even when explicit data is not provided, raises serious ethical concerns (Mühlhoff, 2023; Henley, 2021). These risks can be mitigated through participatory oversight mechanisms, ensuring that AI does not perpetuate intrusive or harmful data practices (Burrell, 2016; Loi & Christen, 2020). By advocating for the Right to AI, communities can establish consent-based frameworks that prioritize ethical data handling.

Addressing Statistical Discrimination AI often relies on statistical generalizations that may fail to respect the uniqueness of individuals (Adams-Prassl et al., 2023; Barocas & Selbst, 2016; Kleinberg et al., 2019). A participatory approach to AI governance would enable affected communities to challenge harmful biases and demand equitable algorithmic design (Harcourt, 2007; Larson et al., 2016). The Right to AI provides a means for individuals to contest algorithmic categorizations and push for more inclusive and fair outcomes (Chen, 2023).

**Obligation to Provide Justification** When AI influences critical life decisions, increased transparency and explainability may be warranted (Grant et al., 2023; Vredenburgh, 2022; Rubel et al., 2020; Tasioulas, 2023). A Right to AI

approach aligns with the notion that those subject to algorithmic decisions should have a means to access comprehensible justifications (Candrian & Scherer, 2022).

#### F. Hidden Choices

We end this paper with below analogy:

#### Imagine it's 2035...

You walk into a restaurant, but you don't order—your meal has already been decided for you. The chefs claim to know your tastes, preferences, and needs better than you do. The recipes are hidden, the kitchen is closed to outsiders, and any attempt to question or change your meal is met with silence. If this is the only restaurant in town, your choices aren't just limited—they're non-existant.

Now, imagine AI works in the same way. A small group of actors dictate what information you see and which services you can access. The *Right to AI* challenges this imbalance, asserting that communities should not merely be passive consumers but active participants in designing, governing, and overseeing AI. To maintain our autonomy and choice, we must have a say in how the AI that dictates our preferences and choices is built and deployed.