

“Democratizing AI” and the Concern of Algorithmic Injustice (Extended Abstract)

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Abstract

Based on a socio-technical understanding of algorithmic injustice, this paper examines three notable notions of democratizing AI and their associated measures—democratizing AI use, democratizing AI development, and democratizing AI governance—regarding their respective prospects and limits in response to algorithmic injustice.

Link to full paper: <https://shorturl.at/65V2v>

Extended Abstract

The overarching goal of this paper is to disambiguate the idea of “democratizing AI” and to examine the implications that “democratizing AI”—when understood and implemented in different ways—has on algorithmic injustice. While some critical reflections on “democratizing AI” have been raised recently, a systemic examination of these different forms of “democratizing AI” through the lens of algorithmic injustice—which is one of the key motivations for democratizing AI—does not exist. In a time when the slogan of “democratizing AI” is used by different actors for different purposes, it is of timely urgency to pay closer scrutiny to the implications that different proposals of democratizing AI have on shaping the power dynamics embedded in the socio-technical structure. By centering the examinations around algorithmic injustice, this paper aims to shed some light on envisioning a more just path to democratize AI.

To set the ground for the analysis, in Section 2, building on Iris M. Young’s (2011) theory on structural injustice, I present a socio-technical understanding of algorithmic injustice. According to this understanding, algorithmic injustice is a case of structural injustice that exists when the socio-technical structure shaped by AI systemically exposes large groups of people to undeserved burdens while conferring unearned benefits to others, thereby exacerbating unjustified power hierarchies or imbalances between people along various axes of social categories. Understanding algorithmic injustice in this way, I argue, helps illuminate

why democratizing AI might seem a promising response to it.

In Sections 3 to 5, I examine how recent proposals on democratizing AI respond to algorithmic injustice. To do so, I lay out three notable notions of democratizing AI that have been used widely: democratizing AI use (Section 3), or making AI systems accessible for more users, for example, by reducing the costs of using AI systems; democratizing AI development (Section 4), or getting more people involved in the AI development process, such as by lowering technical entry barriers or participatory design; and democratizing AI governance (Section 5), or making AI a domain under the democratic governance through, for example, existing democratic institutions in the government sector, direct participation, or representative deliberation.

In Section 6, I reflect on the analysis and discuss the practical implications of approaching democratizing AI. The analysis from the previous sections reveals that there is no simple yes or no answer to whether “democratizing AI” can mitigate algorithmic injustice; instead, how the detailed notions and practices are laid out makes huge differences. For each of the three notions examined, some versions bear better prospects of mitigating the concern of algorithmic injustice, while others are somewhat limited and might even function to perpetuate problematic power hierarchies. Without a proper distinction between different ways of democratizing AI, we face a danger that I refer to as “democracy washing,” which occurs when the label “democratizing AI” is used overly generally and may function to block needed scrutiny of the associated practices and their impacts. I end by discussing how paying closer attention to the power dynamics embedded in the socio-technical structure can help avoid democracy washing and refine approaches to democratizing AI.

References

Young, I. M. 2011. *Responsibility for Justice*. New York: Oxford University Press.