

The Power Dynamics of Design For and Design By People With Disabilities

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This paper focuses on the power dynamics involved in the interaction between people with disabilities, Human Computer Interaction (HCI), and Data Science (DS). One emerging area of problematic interaction between people with disabilities and HCI is the use of Artificial Intelligence (AI) in hiring and human resource decisions. Organizations increasingly utilize Facial Recognition Technology as part of the interview and selection process. Facial Recognition Technology has been found to be racially biased as well as biased for some people with disabilities. These biases in AI result in technology mediated exclusion of people with disabilities from jobs and employment opportunities.

An area of power dynamics in Data Science is the political economy of classification systems (Bowker and Star, 1999). Classification systems, involving people with disabilities typically implement medical models of disability, where the medical profession determines who is disabled, and what the types of disability are. The power dynamics are not only about how classification systems for people with disabilities are created, but also how classification systems are utilized to allocate financial resources, for example government benefits through automated processes. Decisions on people with disabilities receiving benefits are increasingly made algorithmically (Eubanks, 2018), reducing human administrators ability to make exceptions and result in technology mediated exclusion of people with disabilities for receiving benefits.

Finally this paper critically examines information technology entrepreneurship, where the majority of technology developments are led by people designing solutions ‘for’ people with disabilities rather than ‘by’ people with disabilities. The organizations and individuals who are the primary financial beneficiaries of technology for people with disabilities are typically not people with disabilities. Equity for people with disabilities requires not only ability to participate in the development of new technology as end users, but to lead the solution creation and shape the direction of technology development.