

November 3, 2021

To: Gerard Quinn

United Nations Special Rapporteur on the Rights of Persons with Disabilities

Re: Inputs - SR Disability Report on artificial intelligence

The Center for Democracy & Technology (CDT) respectfully submits these comments in response to the Special Rapporteur's call for inputs on the impact of artificial intelligence (AI) on people with disabilities. CDT is a nonprofit organization based in Washington, D.C., and Brussels that is dedicated to challenging discriminatory technology practices. CDT's project on AI and disability rights analyzes how AI can cause and reinforce barriers to vital services and opportunities, and how AI and automated decision-making (ADM) may effectively penalize people for being disabled – especially when disability intersects with other marginalized identities. Through this project, we engage with fellow technology policy, disability advocacy, and other civil rights organizations to push for regulation, enforcement, and redesign that improves outcomes for disabled people.

While the Convention on the Rights of Persons with Disabilities (CRPD) does not explicitly define disability, it describes disability as "an evolving concept" that "results from the interaction between persons with impairments and attitudinal and environmental barriers that hinders their full and effective participation in society on an equal basis with others." We aim to apply this disability justice lens in our policy recommendations for government and private entities. These comments will discuss AI and ADM's outcomes for people with disabilities and applications of relevant laws, with a particular focus on the laws of the United States.

## Impact of AI and ADM for disabled people across different relationships<sup>2</sup>

Al and ADM are designed to streamline processes through standardized approaches that are ill-suited for disability inclusion and fairness. Disability manifests in many different ways, so the needs of each disabled person within the same category may differ significantly. It is also harder to examine the rationale for adverse decisions resulting from ADM than from non-automated processes: ADM systems may either be fundamentally uninterpretable by humans, or proprietary and therefore unexplained.<sup>3</sup>

<sup>&</sup>lt;sup>1</sup> United Nations Convention on the Rights of Persons with Disabilities, pmbl. (e), Jul. 30, 2009, 2515 U.N.T.S. 3.

<sup>&</sup>lt;sup>2</sup> This section addresses Questions 1 through 6 of the Special Rapporteur's Questionnaire for NHRIs, OPDs, Human Rights Defenders, and Civil Society.

<sup>&</sup>lt;sup>3</sup> See Cynthia Rudin, Stop Explaining Black Box Machine Learning Models for High Stakes Decisions and Use Interpretable Models Instead, 1 Nature Machine Intelligence 206 (2019), <a href="https://arxiv.org/abs/1811.10154">https://arxiv.org/abs/1811.10154</a>.



As the CRPD recognizes, the intersection of disability with other marginalized identities has led to "aggravated forms of discrimination," making standardized approaches even less appropriate.<sup>4</sup>

In the European Union (EU), the General Data Protection Regulation (GDPR) prohibits decisions based solely on automated processing of genetic or biometric data or data concerning health.<sup>5</sup> The Council of Europe is continuing efforts to adopt its 2008 directive proposal to prohibit disability discrimination across these structures.<sup>6</sup> In the U.S., medical professionals have needed to be reminded that allocating medical care based on disabled people's "worth" during public health emergencies violates civil rights laws.<sup>7</sup> If sentient humans struggle with the intrinsic value of life, it follows that the tools they build are unlikely to make appropriate decisions about access to health care during or after a crisis. Judgments on the relative value of life permeate across social structures discussed below, contradicting the CRPD's recognition of the "inherent dignity and worth" of people with disabilities.<sup>8</sup>

These concerns should inform efforts to advance the UN's work on privacy rights and its priorities described in the 2018 UN Disability and Development Report in the following relationships.<sup>9</sup>

### A. Person and health care system

Al tools are increasingly used in health services for diagnostic and treatment purposes. Standardized approaches are used for formal documented diagnosis, which is the gatekeeper to necessary accommodations and supports, but diagnostic standards tend to reestablish racial, gender, and class biases, as well as biases about disability itself.<sup>10</sup> Due to disproportionate data collection, these

The Treatment of Disability Under Crisis Standards of Care: An Empirical and Normative Analysis of Change Over Time During COVID-19, 46 J. HEALTH POLIT. POL. LAW 831, 833, 836 (2021), <a href="https://read.dukeupress.edu/jhppl/article/46/5/831/172245/The-Treatment-of-Disability-under-Crisis-Standards">https://read.dukeupress.edu/jhppl/article/46/5/831/172245/The-Treatment-of-Disability-under-Crisis-Standards</a>.

<sup>&</sup>lt;sup>4</sup> Convention on the Rights of Persons with Disabilities, *supra* note 1, at pmbl. (p).

<sup>&</sup>lt;sup>5</sup> Regulation (EU) 2016/679 of the European Parliament and of the Council of 27 April 2016 on the protection of natural persons with regard to the processing of personal data and on the free movement of such data, and repealing Directive 95/46/EC (General Data Protection Regulation), OJ 2016 L 119/1, art. 9(1) and 22. See also Charter of Fundamental Rights of the European Union, OJ 2010 C 83/389, art. 21.

<sup>&</sup>lt;sup>6</sup> Proposal for a Council Directive on implementing the principle of equal treatment between persons irrespective of religion or belief, disability, age or sexual orientation, COM (2008) 0426 final (Jul. 2, 2008); Alice Kuhnke, European Parliament, Anti-discrimination Directive, in Legislative Train Schedule: Area of Justice and Fundamental Rights (2021), <a href="https://www.europarl.europa.eu/legislative-train/theme-area-of-justice-and-fundamental-rights/file-anti-discrimination-directive">https://www.europarl.europa.eu/legislative-train/theme-area-of-justice-and-fundamental-rights/file-anti-discrimination-directive</a>.

<sup>&</sup>lt;sup>7</sup> See U.S. Dep't of Health and Hum. Serv., Bulletin on Civil Rights, HIPAA, and the Coronavirus Disease (COVID-19) (Mar. 28. 2020), <a href="https://www.hhs.gov/sites/default/files/ocr-bulletin-3-28-20.pdf">https://www.hhs.gov/sites/default/files/ocr-bulletin-3-28-20.pdf</a>; Ari Ne'eman,

<sup>&</sup>lt;sup>8</sup> Convention on the Rights of Persons with Disabilities, *supra* note 1, at pmbl. (h).

<sup>&</sup>lt;sup>9</sup> U.N. High Comm'r for Human Rights, *The Right to Privacy in the Digital Age*, U.N. Doc. A/HRC/48/31 (Sept. 15, 2021), <a href="https://www.ohchr.org/EN/Issues/DigitalAge/Pages/cfi-digital-age.aspx">https://www.ohchr.org/EN/Issues/DigitalAge/Pages/cfi-digital-age.aspx</a>; U.N. Dep't of Econ. and Soc. Affairs, Rep. on Disability and Development: Realizing the Sustainable Development Goals by, for, and with Persons with Disabilities (2018), <a href="https://social.un.org/publications/UN-Flagship-Report-Disability-Final.pdf">https://social.un.org/publications/UN-Flagship-Report-Disability-Final.pdf</a>.

<sup>&</sup>lt;sup>10</sup> Cynthia Bennett and Os Keyes, *What is the Point of Fairness? Disability, AI, and the Complexity of Justice*, 27 ACM SIGACCESS ACCESSIBILITY AND COMPUTING 2-3 (2019), https://arxiv.org/pdf/1908.01024.pdf.



standards are incorporated into data sets that exclude or misrepresent disabled people<sup>11</sup> and that may not reflect disparities that contribute to disability among multiply marginalized people.<sup>12</sup> Consequently, AI trained on these unrepresentative data sets can lead to medical interventions that are not based on actual health care needs.<sup>13</sup>

In the government benefits context, ADM has been used to approve or allocate long-term supports and services, analyzing data about a person's ability to perform activities of daily living in order to decide how many hours of care they need, or to calculate a budget based on the necessary hours of care. <sup>14</sup> ADM has been used for other benefits, like unemployment insurance or nutritional assistance, to match the information in benefits applications to identity or income data in government databases to detect fraud or determine eligibility. <sup>15</sup> As the U.N. Office of the High Commissioner for Human Rights' Special Rapporteur on extreme poverty and human rights has documented, these uses of ADM have made inaccurate determinations about eligibility and needs, with a significant human toll as people were denied necessary benefits or wrongly accused of fraud. <sup>16</sup>

In the U.S., legal cases have been brought to challenge the use of ADM in benefits decisions.<sup>17</sup> Plaintiffs have successfully argued that poorly-designed and opaque ADM violated their constitutional right to due process, which requires that benefits recipients receive notice, explanation, and a right to appeal when their benefits are reduced, and that such decisions not be arbitrary. Plaintiffs have also argued that governments adopting ADM violated the Administrative Procedure Act, which requires U.S. government agencies to give notice and allow public comment before adopting new programs or rules. If a person's benefits are reduced to the point that they can no longer live independently, it may violate the Americans with Disabilities Act's (ADA) mandate to "administer services, programs, and

<sup>&</sup>lt;sup>11</sup> See Katherine J. Igoe, Algorithmic Bias in Health Care Exacerbates Social Inequities, HARVARD T.H. CHAN SCHOOL OF PUBLIC HEALTH (Mar. 12, 2021), <a href="https://www.hsph.harvard.edu/ecpe/how-to-prevent-algorithmic-bias-in-health-care/">https://www.hsph.harvard.edu/ecpe/how-to-prevent-algorithmic-bias-in-health-care/</a> (citing Trishan Panch, et al., <a href="https://iogh.org/documents/issue201902/jogh-09-020318.pdf">https://iogh.org/documents/issue201902/jogh-09-020318.pdf</a>). GLOB. HEALTH 1-2 (2019), <a href="https://iogh.org/documents/issue201902/jogh-09-020318.pdf">https://iogh.org/documents/issue201902/jogh-09-020318.pdf</a>).

<sup>&</sup>lt;sup>12</sup> Daniel Young, *Black, Disabled, and Uncounted*, Nat'l Health Law Program (Aug. 7, 2020), <a href="https://healthlaw.org/black-disabled-and-uncounted/">https://healthlaw.org/black-disabled-and-uncounted/</a>.

<sup>&</sup>lt;sup>13</sup> Ziad Obermeyer et al., *Dissecting Racial Bias in an Algorithm Used to Manage the Health of Populations*, 366 SCIENCE 447 (2019), <a href="https://pubmed.ncbi.nlm.nih.gov/31649194/">https://pubmed.ncbi.nlm.nih.gov/31649194/</a> (discussing the use of patients' health care expenses as a factor for predicting risk of illness).

<sup>&</sup>lt;sup>14</sup> See generally Lydia X.Z. Brown et al., Ctr. for Democracy & Tech., Challenging the Use of Algorithm-driven Decision-making in Benefits Determinations Affecting People with Disabilities (2020), <a href="https://cdt.org/wp-content/uploads/2020/10/2020-10-21-Challenging-the-Use-of-Algorithm-driven-Decision-making-in-Benefits-Determinations-Affecting-People-with-Disabilities.pdf">https://cdt.org/wp-content/uploads/2020/10/2020-10-21-Challenging-the-Use-of-Algorithm-driven-Decision-making-in-Benefits-Determinations-Affecting-People-with-Disabilities.pdf</a>.

<sup>&</sup>lt;sup>15</sup> *Id.* at 6, 21. Al is used in welfare systems globally in ways that worsen poverty. *See Automating Poverty: A Series Exploring How Our Governments Use AI to Target the Vulnerable*, The Guardian (2019), <a href="https://www.theguardian.com/technology/series/automating-poverty">https://www.theguardian.com/technology/series/automating-poverty</a>.

<sup>&</sup>lt;sup>16</sup> U.N. High Comm'r for Human Rights, World Stumbling Zombie-like Into a Digital Welfare Dystopia, Warns UN Human Rights Expert (Oct. 17, 2019), <a href="https://www.ohchr.org/EN/NewsEvents/Pages/DisplayNews.aspx?NewsID=25156">https://www.ohchr.org/EN/NewsEvents/Pages/DisplayNews.aspx?NewsID=25156</a>.

<sup>&</sup>lt;sup>17</sup> Brown, *supra* note 14, at 10 (analyzing successes and challenges in legal claims arising from violations of due process, notice-and-comment rulemaking requirements, and the ADA's community integration mandate).



activities in the most integrated setting appropriate to the needs of qualified individuals with disabilities."<sup>18</sup> These harms also violate disabled people's rights under the CRPD to property ownership, to adequate living standards, and to independent living and community inclusion.<sup>19</sup> We therefore urge the Special Rapporteur to condemn ADM that contributes to these harms.

## B. Person and criminal legal system

In the U.S., AI development has expanded person- and place-based predictive policing.<sup>20</sup> Globally, disabled people and other marginalized communities experience higher rates of poverty, which is a target for place-based predictive policing due to biases regarding correlations between gang activity and locations with higher poverty.<sup>21</sup> Additionally, marginalized communities have higher rates of disability, and person-based predictive policing that considers people's social connections and misrepresentative arrest records increases the frequency with which multiply-marginalized disabled people interact with law enforcement.<sup>22</sup> Law enforcement entities are often unequipped to respond appropriately to mental health crises and fail to recognize when deafness or cognitive disabilities interfere with ability to communicate during tense police interactions.<sup>23</sup>

Predictive analytics extend to the court and carceral system, where ADM has been used to inform judges' decisions about whether to grant pretrial bail or to release people on parole.<sup>24</sup> Risk assessments algorithmically evaluate factors such as education level, employment status, and social connections, which are presumed to indicate a person's likelihood of recidivism.<sup>25</sup> This approach can entrench existing societal biases. For example, researchers have documented a widely-used risk assessment algorithm that assigned higher recidivism "risk scores" to Black people because they

<sup>&</sup>lt;sup>18</sup> *Id.* at 16-17; 28 C.F.R. § 35.130(d).

<sup>&</sup>lt;sup>19</sup> Convention on the Rights of Persons with Disabilities, *supra* note 1, at art. 12, 19, and 28.

<sup>&</sup>lt;sup>20</sup> Lydia X.Z. Brown and Ridhi Shetty, *Critical Scrutiny of Predictive Policing is a Step to Reducing Disability Discrimination*, CTR. FOR DEMOCRACY & TECH. (Jul. 23, 2020), <a href="https://cdt.org/insights/critical-scrutiny-of-predictive-policing-is-a-step-to-reducing-disability-discrimination/">https://cdt.org/insights/critical-scrutiny-of-predictive-policing-is-a-step-to-reducing-disability-discrimination/</a>.

<sup>&</sup>lt;sup>21</sup> See id.; Arthur Nelsen, *Pushback Against AI Policing in Europe Heats Up Over Racism Fears*, Reuters (Oct. 20, 2021, 8:25 AM), <a href="https://www.reuters.com/article/us-europe-tech-police/">https://www.reuters.com/article/us-europe-tech-police/</a> pushback-against-ai-policing-in-europe-heats-up-over-racism-fears-idUSKBN2HA1G2; MILES KENYON, CITIZEN LAB, ALGORITHMIC POLICING IN CANADA EXPLAINED (2020), <a href="https://citizenlab.ca/2020/09/algorithmic-policing-in-canada-explained/">https://citizenlab.ca/2020/09/algorithmic-policing-in-canada-explained/</a>; Michael McGowan, *More Than 50% of Those on Secretive NSW Police Blacklist are Aboriginal*, The GUARDIAN (Nov. 10, 2017, 2:31 PM), <a href="https://www.theguardian.com/australia-news/2017/nov/11/more-than-50-of-those-on-secretive-nsw-police-blacklist-are-aboriginal">https://www.theguardian.com/australia-news/2017/nov/11/more-than-50-of-those-on-secretive-nsw-police-blacklist-are-aboriginal</a>.

<sup>&</sup>lt;sup>22</sup> Brown, *supra* note 20.

<sup>&</sup>lt;sup>23</sup> Id.

<sup>&</sup>lt;sup>24</sup> Julia Angwin et al., *Machine Bias*, PROPUBLICA (May 23, 2016), <a href="https://www.propublica.org/article/machine-bias-risk-assessments-in-criminal-sentencing">https://www.propublica.org/article/machine-bias-risk-assessments-in-criminal-sentencing</a>; Megan T. Stevenson and Christopher Slobogin, *Algorithmic Risk Assessments and the Double-Edged Sword of Youth*, 96 WASH. U. L. REV. 681 (2018),

https://openscholarship.wustl.edu/cgi/viewcontent.cgi?article=6353&context=law lawreview.

<sup>&</sup>lt;sup>25</sup> Angwin, *supra* note 24.



evaluated factors reflecting inequitable access to education, employment, and other opportunities.<sup>26</sup> Such algorithms pose a similar threat to disabled people, who experience similar inequities and thus may also face discrimination based on circumstances beyond their control. The CRPD requires appropriate training for parties responsible for administering justice, as well as measures to prevent cruel or degrading treatment.<sup>27</sup> However, treatment that subjects disabled people to disproportionately greater criminalization is left uncorrected due to over-reliance on improperly designed ADM. Therefore, the Special Rapporteur should make clear that ADM does not replace the CRPD's obligations to affirmatively protect disabled people's access to justice.

## C. Workers and employers

Al and ADM are used throughout the hiring process to execute existing hiring practices more expeditiously, often recreating inherent hiring biases without accountability. Some of these tools scan resumes to detect text that matches an employer's desired qualities or common traits among "high-performing" employees. Some tools analyze speech, facial expressions, eye contact, and physical movements to determine whether a candidate seems trustworthy or nervous. Some tools evaluate a candidate's performance on a series of games or responses on personality tests to determine if the candidate has the aptitudes or personality traits believed to ensure job success. However, each of these approaches may deepen workforce exclusion. A resume screening tool may penalize a candidate who has gaps in their resume caused by medical leave, without allowing the candidate an opportunity to explain their circumstances. Tools that analyze facial expressions, eye contact, or game performance may all discriminate against people with physical disabilities. Games and personality tests measure qualities that may be irrelevant to essential job functions, disqualifying candidates with cognitive or mental health disabilities even though they are capable of performing the essential functions of the job.

Al used in employment does not account for the various ways in which skills and qualities that correlate with professional success are acquired or demonstrated. Over time, AI may learn to reflect changing hiring trends, but it is not designed to capture all these variations that would require an AI-driven tool to deviate from the standardized approach it was designed to use. The tools described above also cannot consider all reasonable accommodations that disabled candidates may require in order to be fairly evaluated, or the range of accommodations that would be available to the candidate in the actual workplace. Too often, AI and ADM tools further bar candidates with disabilities from job opportunities. AI should be used to expand "the opportunity to gain a living by work freely chosen and

<sup>&</sup>lt;sup>26</sup> Id.

<sup>&</sup>lt;sup>27</sup> Convention on the Rights of Persons with Disabilities, *supra* note 1, at art. 13 and 15.

<sup>&</sup>lt;sup>28</sup> Ctr. for Democracy & Tech., Algorithm-Driven Hiring Tools: Innovative Recruitment or Expedited Disability Discrimination? (2020), <a href="https://cdt.org/wp-content/uploads/2020/12/Full-Text-Algorithm-driven-Hiring-Tools-Innovative-Recruitment-or-Expedited-Disability-Discrimination.pdf">https://cdt.org/wp-content/uploads/2020/12/Full-Text-Algorithm-driven-Hiring-Tools-Innovative-Recruitment-or-Expedited-Disability-Discrimination.pdf</a> (describing how certain AI tools used to evaluate job candidates may worsen hiring disparities for people with disabilities).



accepted," as the CRPD requires, by identifying disabled candidates whose skills and qualities would otherwise be overlooked through traditional hiring practices.<sup>29</sup>

Disability discrimination extends to workplace technologies. Certain automated work technologies are beneficial: for example, automated captioning can somewhat supplement verbal communication (but see p.9, below). However, automated surveillance technologies, known as "bossware," are used to monitor worker productivity and breaks, which can increase workplace injuries – to physical and mental health – as workers try to meet higher productivity demands without rest.<sup>30</sup> Disabled workers are more susceptible to similar or worse injuries. Requesting accommodations can require disclosure and documentation of their disability, are exposing them to added stigma and potentially adverse changes to working conditions or employment status. Further, bossware looks for specific behaviors to determine that workers are completing tasks. Workers who complete tasks through an atypical approach or with accommodations may be penalized regardless of their ultimate performance.

In the U.S., the ADA prohibits the use of hiring criteria that are irrelevant to business needs but tend to screen out disabled candidates, and that do not account for candidates' job performance with accommodations. Yet, opaque ADM may evade accountability, leading the U.S. Equal Employment Opportunity Commission to announce an initiative to ensure that AI and ADM used to make employment decisions comply with antidiscrimination laws. In the EU, the Employment Equality Directive also prohibits disability discrimination, but when it involves AI, access to remedy remains a hurdle due to the lack of obligations and clarity surrounding explainability, transparency and accountability. AI and ADM that restrict disabled people's access to jobs violate the CRPD's requirement to prevent discrimination in all employment matters, ensure favorable work conditions, and promote career advancement. The Special Rapporteur should urge thorough evaluation of how these technologies are designed, deployed, and tested, and how remedies can be practically accessed.

### D. Students and educational institutions

https://www.eeoc.gov/newsroom/eeoc-launches-initiative-artificial-intelligence-and-algorithmic-fairness.

<sup>&</sup>lt;sup>29</sup> Convention on the Rights of Persons with Disabilities, *supra* note 1, at art. 27.

<sup>&</sup>lt;sup>30</sup> MATT SCHERER, CTR. FOR DEMOCRACY & TECH., WARNING: BOSSWARE MAY BE HAZARDOUS TO YOUR HEALTH (2021), https://cdt.org/wp-content/uploads/2021/07/2021-07-29-Warning-Bossware-May-Be-Hazardous-To-Your-Health-Final.pdf.

<sup>&</sup>lt;sup>31</sup> Documenting a disability is more challenging for multiply marginalized people who face inequitable access to formal diagnosis, treatment, and health management. *See* II(A), *supra*.

<sup>&</sup>lt;sup>32</sup> 42 U.S.C. §12112(b)(5)-(6).

<sup>&</sup>lt;sup>33</sup> U.S. Equal Emp. Opportunity Comm'n, Press Release on EEOC Launches Initiative on Artificial Intelligence and Algorithmic Fairness (Oct. 28, 2021),

<sup>&</sup>lt;sup>34</sup> See Raphaële Xenidis and Linda Senden, EU Non-discrimination Law in the Era of Artificial Intelligence: Mapping the Challenges of Algorithmic Discrimination, in General Principles of EU LAW and the EU Digital Order 151-82 (Ulf Bernitz et al. eds., Kluwer Law International 2020), <a href="https://papers.ssrn.com/sol3/papers.cfm?abstract\_id=3529524">https://papers.ssrn.com/sol3/papers.cfm?abstract\_id=3529524</a> (citing Directive 2000/78/EC for the grounds of disabilities, religion or belief, age and sexual orientation, OJ 2000 L 303/16).

<sup>&</sup>lt;sup>35</sup> Convention on the Rights of Persons with Disabilities, *supra* note 1, at art. 27.



The use of AI and ADM in many school systems begins with placement algorithms that match students to schools based on their attendance records and academic performance, without considering factors such as health disparities or lack of accommodations.<sup>36</sup> Schools have implemented AI tools to monitor student behavior for safety concerns and to maintain academic integrity when administering exams remotely.<sup>37</sup> School threat assessments involve reviewing students' communications and social media posts to detect risk of self-harm or mental health disabilities,<sup>38</sup> as well as facial recognition technology to flag suspected "strangers" on campus.<sup>39</sup> During the COVID-19 pandemic, facial recognition has also been used to monitor compliance with safety protocols and to monitor behavior and sounds during remote proctoring.<sup>40</sup>

In addition, higher education institutions are attempting to measure the likelihood that a student will drop out of their institution through algorithms that use race and other variables to predict academic success in various areas of study. As with school placement algorithms, AI that attempts to assign students to college majors is not designed to consider the compounding effects of past ableism and racism. For example, remote learning expanded learning opportunities for students with certain disabilities during the pandemic. For other disabilities, however, students who rely on an in-person school structure to keep up with schoolwork have not received the increased or modified support they need in remote learning, causing them to fall behind – disabled students of color have been further penalized. Algorithms for school placement and academic major selection would predict a lower likelihood of success for these students. In addition, similar to the employment context, AI's

<sup>&</sup>lt;sup>36</sup> See Colin Lecher and Maddy Varner, *NYC's School Algorithms Cement Segregation. This Data Shows How*, The Markup (May 26, 2021, 8:00 AM), <a href="https://themarkup.org/news/2021/05/26/nycs-school-algorithms-cement-segregation-this-data-shows-how">https://themarkup.org/news/2021/05/26/nycs-school-algorithms-cement-segregation-this-data-shows-how</a>.

<sup>&</sup>lt;sup>37</sup> Elizabeth Laird and Cody Venzke, Ctr. for Democracy & Tech., Comments to Office of Civil Rights, Dept. of Ed. on Protecting Privacy Rights and Ensuring Equitable Algorithmic Systems for Students of Color and Students with Disabilities 3 (2021), <a href="https://cdt.org/wp-content/uploads/2021/07/2021-07-23-CDT-Title-VI-Comments.pdf">https://cdt.org/wp-content/uploads/2021/07/2021-07-23-CDT-Title-VI-Comments.pdf</a>.

<sup>38</sup> *Id*.

<sup>&</sup>lt;sup>39</sup> Alfred Ng, Facial Recognition in Schools: Even Supporters Say It Won't Stop Shootings, CNET (Jan. 24, 2020), <a href="https://www.cnet.com/features/facial-recognition-in-schools-even-supporters-say-it-wont-stop-shootings">https://www.cnet.com/features/facial-recognition-in-schools-even-supporters-say-it-wont-stop-shootings</a>; Shobita Parthasarathy et al., University of Michigan, Cameras in the Classroom 31 (2021), <a href="https://stpp.fordschool.umich.edu/sites/stpp/files/uploads/file-assets/cameras">https://stpp.fordschool.umich.edu/sites/stpp/files/uploads/file-assets/cameras</a> in the classroom full report.pdf.

<sup>&</sup>lt;sup>40</sup> Lydia X.Z. Brown, *How Automated Test Proctoring Software Discriminates Against Students with Disabilities*, CTR. FOR DEMOCRACY & TECH. (2020), <a href="https://cdt.org/insights/how-automated-test-proctoring-software-discriminates-against-disabled-students/">https://cdt.org/insights/how-automated-test-proctoring-software-discriminates-against-disabled-students/</a>.

<sup>&</sup>lt;sup>41</sup> Todd Feathers, *Major Universities Are Using Race as a "High Impact Predictor" of Student Success*, The Markup (Mar. 2, 2021, 8:00 AM), <a href="https://themarkup.org/news/2021/03/02/major-universities-are-using-race-as-a-high-impact-predictor-of-student-success">https://themarkup.org/news/2021/03/02/major-universities-are-using-race-as-a-high-impact-predictor-of-student-success</a>.

<sup>&</sup>lt;sup>42</sup> Jodi S. Cohen, *A Teenager Didn't Do Her Online Schoolwork. So a Judge Sent Her to Juvenile Detention*, PROPUBLICA (Jul. 14, 2020, 5:00 AM), <a href="https://www.propublica.org/article/a-teenager-didnt-do-her-online-schoolwork-so-a-judge-sent-her-to-juvenile-detention">https://www.propublica.org/article/a-teenager-didnt-do-her-online-schoolwork-so-a-judge-sent-her-to-juvenile-detention</a> (describing school and law enforcement's treatment of a Black student with ADHD when her Individual Education Plan was not properly adapted from in-person to virtual learning).



applications do not adapt to the range of disability experiences, so AI has not provided the various accommodations necessary for students' success.

In the U.S., the ADA and the Rehabilitation Act prohibit discrimination in public educational institutions, and the ADA also covers private schools and universities as places of public accommodation. Further, the CRPD prohibits cruel and degrading treatment and punishment, and it recognizes the right to an inclusive, quality education with necessary accommodations and support to maximize academic and social development. Al trained with data that reflects existing patterns of treating students of color as more threatening will reproduce these patterns at scale. Humans more often respond to disability in students of color with increased law enforcement interaction rather than necessary academic and social supports, and will interpret Al's outputs so as to produce the same response. The Special Rapporteur should acknowledge that Al may embed an educational institution's biased disciplinary practices and condemn the use of Al that exacerbates these harms.

# E. Consumers and providers of goods and services

ADM systems inform consumer lending decisions and facilitate tenant screening, often by analyzing education history, employment history, employment income, and public and criminal records to predict whether applicants will fulfill their obligations if their applications are approved. As addressed above, disabled people have historically experienced inequitable access to and overt discrimination in education, employment, and the criminal legal system. When access to certain goods or services depends on these records, ADM systems that use these types of data may inaccurately deduce that people with disabilities would not fulfill their obligations. The same factors are less likely to disfavor people who are not historically marginalized. As a result, ADM systems can maintain a harmful status quo where people with disabilities cannot access the same quality of goods and services. The systems' opacity prevents consumers from correcting any data inaccuracies causing adverse decisions, or providing context for unfavorable data that warrants reconsideration of their applications.

ADM used to target online advertising may also unfairly discriminate against disabled people. For example, Facebook rejected an advertisement for adaptive clothing because the advertisement showed a person in a wheelchair, prompting Facebook's algorithm to wrongly assume it promoted

<sup>&</sup>lt;sup>43</sup> 42 U.S.C. §12132 (applying to public schools as federally funded entities); 29 U.S.C. §794 ((applying to public schools as federally funded entities); 42 U.S.C. §12181(7) (applying to private places of education).

<sup>&</sup>lt;sup>44</sup> Convention on the Rights of Persons with Disabilities, *supra* note 1, at art. 15 and 24.

<sup>&</sup>lt;sup>45</sup> See Cohen, supra note 42.

<sup>&</sup>lt;sup>46</sup> Ridhi Shetty, Ctr. for Democracy & Tech., Comments to Federal Financial Regulators on Financial Institutions' Use of AI and ML 2-3 (2021), <a href="https://cdt.org/wp-content/uploads/2021/07/2021-07-01-CDT-Request-for-Information-and-Comment-on-Financial-Institutions-Use-of-Artificial-Intelligence-including-Machine-Learning.pdf">https://cdt.org/wp-content/uploads/2021/07/2021-07-01-CDT-Request-for-Information-and-Comment-on-Financial-Institutions-Use-of-Artificial-Intelligence-including-Machine-Learning.pdf</a>.

<sup>&</sup>lt;sup>47</sup> Lydia X. Z. Brown, *Tenant Screening Algorithms Enable Racial and Disability Discrimination at Scale, and Contribute to Broader Patterns of Injustice*, CTR. FOR DEMOCRACY & TECH. (July 7, 2021), <a href="https://cdt.org/insights/tenant-screening-algorithms-enable-racial-and-disability-discrimination-at-scale-and-contribute-to-broader-patterns-of-injustice">https://cdt.org/insights/tenant-screening-algorithms-enable-racial-and-disability-discrimination-at-scale-and-contribute-to-broader-patterns-of-injustice.</a>



medical devices, which Facebook prohibits.<sup>48</sup> This exemplifies how the algorithms involved in content analysis and moderation can fail to account for disabled people. Targeted advertising may also direct or withhold advertisements for particular jobs, housing opportunities, or exploitative products or loans.<sup>49</sup> Further, advertisements based on inferences about a person's health status<sup>50</sup> pose a particular risk in the U.S. where health data practices are largely unregulated outside of medical settings, making it easier to target people based on potential proxies for their disability.<sup>51</sup> By restricting the advertisements that disabled people can experience, targeted advertising can violate the right to access information and services intended for the general public under the CRPD.<sup>52</sup>

Certain AI-driven tools that purport to *help* disabled people may also have deleterious effects. For example, an increasing number of social media sites and video conferencing sites are deploying automated video captioning, believing that the captions promote accessibility. However, the quality of automated captioning is often so poor that this effort actually harms disabled people, because video producers or meeting hosts no longer invest in high-quality, accurate captioning to actually meet their viewers' needs.<sup>53</sup>

In the U.S., fair credit laws restrict the use of information related to credit worthiness, general reputation, personal characteristics, or mode of living, which can all be proxies for disability.<sup>54</sup> The Fair Housing Act explicitly prohibits disability discrimination.<sup>55</sup> The ADA may apply where providers with physical business locations use AI and ADM to make discriminatory housing, credit, and health care decisions.<sup>56</sup> These discriminatory decisions may violate the CRPD's requirement for effective measures

<sup>&</sup>lt;sup>48</sup> Vanessa Friedman, *Why is Facebook Rejecting These Fashion Ads?*, N.Y. TIMES (Feb. 11, 2021), https://www.nytimes.com/2021/02/11/style/disabled-fashion-facebook-discrimination.html.

<sup>&</sup>lt;sup>49</sup> Muhammad Ali et al., *Discrimination Through Optimization: How Facebook's Ad Delivery Can Lead to Skewed Outcomes* 1-2, PROCEEDINGS OF THE ACM ON HUMAN-COMPUTER INTERACTION (2019) <a href="https://arxiv.org/pdf/1904.02095.pdf">https://arxiv.org/pdf/1904.02095.pdf</a>.

<sup>&</sup>lt;sup>50</sup> Facebook Reportedly Received Users' Sensitive Health Data From Apps: "It's Incredibly Dishonest," CBS News (Feb. 22, 2019, 5:45 PM), <a href="https://www.cbsnews.com/news/facebook-reportedly-received-sensitive-health-data-from-apps-without-consent/">https://www.cbsnews.com/news/facebook-reportedly-received-sensitive-health-data-from-apps-without-consent/</a>.

<sup>&</sup>lt;sup>51</sup> Protections under the U.S. Health Insurance Portability and Accountability Act (Pub. L. No. 104-191, § 264, 110 Stat.1936) are limited to health data held by doctors and health insurance companies, but do not cover commercial health data practices. See Andrew Crawford and Alice Leiter, Ctr. for Democracy & Tech. and eHealth Initiative, Proposed Consumer Privacy Framework for Health Data 4 (2021), <a href="https://cdt.org/wp-content/uploads/2021/02/2021-02-09-CDT-and-eHI-Proposed-Consumer-Privacy-Framework-for-Health-Data-d-FINAL.pdf">https://cdt.org/wp-content/uploads/2021/02/2021-02-09-CDT-and-eHI-Proposed-Consumer-Privacy-Framework-for-Health-Data-d-FINAL.pdf</a>. As a result, people in the U.S. rely on the Federal Trade Commission Act's protection against unfair or deceptive acts or practices and state laws that would extend to commercial health data. 15 U.S.C. §45.

<sup>&</sup>lt;sup>52</sup> Convention on the Rights of Persons with Disabilities, *supra* note 1, at art. 21.

<sup>&</sup>lt;sup>53</sup> Sheri Byrne-Haber, *Are Bad Captions Better Than No Captions?*, MEDIUM (Mar. 29, 2021), https://sheribyrnehaber.medium.com/are-bad-captions-better-than-no-captions-cd284cfd14c7.

<sup>&</sup>lt;sup>54</sup> 15 U.S.C. §1681a(d)-(e).

<sup>&</sup>lt;sup>55</sup> 46 U.S.C. §3604.

<sup>&</sup>lt;sup>56</sup> The ADA applies to places of public accommodation, including a place of lodging, a bank, or a hospital or health care provider's office. 42 U.S.C. §12181(7). The ADA and Rehabilitation Act also protect against discrimination in providing goods and services if the provider is federally funded. 42 U.S.C. §12132; 29 U.S.C. §794.



to ensure equal rights to credit, adequate housing and continuously improving living conditions, and quality and affordable health care.<sup>57</sup>

# Policymaking and changes to AI practices led by disabled people and advocacy groups<sup>58</sup>

Altogether, the areas discussed in these comments impact the extent to which people with disabilities are empowered to meaningfully participate and lead in the wider community. Ableist outcomes from AI and ADM used in one area can adversely affect disabled people across all the other areas. Yet, disability advocacy organizations tend to be led by people who are not disabled or who are unfamiliar with how disability intersects with other marginalized identities. Inclusion, participation, consultation, and leadership are all different roles with different impacts. As with any marginalized community, the role that disabled people get to play and whether their experience and expertise are valued frequently depends on their affiliation with large, reputed institutions. As a result, small organizations, community organizers, and other self-advocates who may not have any institutional affiliation are largely barred from driving policymaking and initiatives to foster more equitable outcomes in AI and ADM. When policymaking is exclusively driven by those who personally have less at stake, policy gaps are overlooked.

#### Conclusion

To truly realize sustainable development goals for people with disabilities, it is important to recognize that AI is not inherently fair, particularly if it has not been developed to affirmatively expand opportunities that human developers have historically limited. While AI theoretically has the potential to improve all of the relationships discussed above, it has instead been used to perform traditionally human-driven processes with less accountability, less visibility into sources of bias, and at a wide scale that risks harming many people at once. The proposed European Union (EU) AI Act is one good example of regulators seriously engaging with the risks of AI, but even that draft legislation falls short as it provides very limited avenues for individual redress or access to remedy, and also misses the opportunity to introduce human rights impact assessments. Furthermore, the theory of risk does not recognize that risk increases when the likelihood, or the seriousness, of infringement on rights of particular groups including persons with disabilities increases.<sup>59</sup>

Using AI for good requires having disabled experts drive collaborative efforts to reexamine the purpose for which AI technologies are created, ensure that the purpose is to prioritize people above expedience, and design and deploy AI in a manner that mitigates risks of disability discrimination. AI systems that better serve people with disabilities will better serve all communities.

<sup>&</sup>lt;sup>57</sup> Convention on the Rights of Persons with Disabilities, *supra* note 1, at art. 12(5), 25, and 28.

<sup>&</sup>lt;sup>58</sup> This section addresses Question 7 of the Special Rapporteur's Questionnaire for NHRIs, OPDs, Human Rights Defenders, and Civil Society.

<sup>&</sup>lt;sup>59</sup> Iverna McGowan and David Nosak, *CDT Europe's Submission on the Ethical and Legal Requirements in the European Commission's AI Act*, CTR. FOR DEMOCRACY & TECH. (Aug. 3, 2021), <a href="https://cdt.org/insights/cdt-europes-submission-on-the-ethical-and-legal-requirements-in-the-european-commissions-ai-act/">https://cdt.org/insights/cdt-europes-submission-on-the-ethical-and-legal-requirements-in-the-european-commissions-ai-act/</a>.



Respectfully submitted,

American Association of People with Disabilities Bazelon Center for Mental Health Law Center for Democracy & Technology Disability Rights Education & Defense Fund