



October 5, 2022

To: D.C. Council Committee on Government Operations & Facilities
1350 Pennsylvania Avenue
Washington, DC, 20004

Re: B24-558, the “Stop Discrimination by Algorithms Act of 2021”

The Center for Democracy & Technology (CDT) respectfully submits these comments in response to the invitation for written testimony by the D.C. Council Committee on Government Operations & Facilities on B24-558, the “Stop Discrimination by Algorithms Act of 2021” (SDAA). CDT is a nonpartisan, nonprofit 501(c)(3) organization that advocates for stronger civil rights protections in the digital age. Our work includes a dedicated focus on discriminatory applications of algorithm-driven practices that affect people’s access to critical opportunities. CDT is heartened by the Committee’s attention to algorithmic harms affecting DC residents. Our comments explain why robust safeguards and restrictions on algorithm-driven decision-making are essential for DC communities.

Technology plays an integral role in making decisions that impact people’s ability to meet fundamental needs. Marginalized communities have long faced systemic barriers to gainful employment, job retention, safe housing, safe use of public spaces, and the financial assistance needed to secure economic stability and build generational wealth. Algorithm-driven systems are increasingly used to streamline decision-making processes across these areas, designed to execute the steps humans traditionally perform but with far less accountability for discriminatory outcomes. The resulting harms reach all marginalized communities and are compounded for multiply marginalized people, such as disabled people of color and LGBTQ+ people from immigrant households.

Companies develop algorithm-driven systems for use across the sectors identified in the bill, specifically in education, employment, and housing and credit. We discuss the resulting harms that can occur in each of these sectors and then discuss some of the measures that could mitigate these harms.

Education

Vendors market algorithm-driven systems to schools to detect unethical conduct, potential threats, and risks to academic success. Student activity monitoring software is a pervasive example. It can track language used in students' social media posts, monitor students' web browsing and search activity, and capture information from students' communications.¹ This puts LGBTQ+ students, students of color, and students with mental health, learning, and physical disabilities at heightened risk of law enforcement interactions, discipline, and nonconsensual disclosure of their gender identity, sexual orientation, or disability.²

Tools like facial recognition and aggression-detection microphones surveil students on school property – facial recognition tools particularly misidentify Black and brown, disabled, and transgender and gender-conforming students, and aggression-detection tools have produced false positives when processing loud, high-pitched audio from students' non-threatening and permitted speech and actions.³ Students are also surveilled at home through automated proctoring software, which hinders test-takers such as those whose disabilities

- require bathroom breaks or other breaks, use of assistive devices, or use of scratch paper;
- cause them to speak out loud, fidget, or look around or away from the screen; or
- affect facial appearance so as to prevent them from being accurately recognized by the software.⁴

Aside from student safety purposes, predictive analytics tools use grades, test performance, and attendance to determine when students may need academic support.⁵ However, they do not

¹ Elizabeth Laird et al, Ctr. For Democracy & Tech., *Hidden Harms: The Misleading Promise of Monitoring Students Online* 8 (2022), <https://cdt.org/wp-content/uploads/2022/08/Hidden-Harms-The-Misleading-Promise-of-Monitoring-Students-Online-Research-Report-Final-Accessible.pdf>.

² *Id.* at 5-6, 23-24.

³ Cody Venzke, *Protecting Student Privacy and Ensuring Equitable Algorithmic Systems in Education*, Ctr. For Democracy & Tech. (Aug. 31, 2021), <https://cdt.org/insights/protecting-student-privacy-and-ensuring-equitable-algorithmic-systems-in-education/>;

Lydia X.Z. Brown et al, Ctr. For Democracy & Tech., *Ableism and Disability Discrimination in New Surveillance Technologies* 10, 23 (2022), <https://cdt.org/wp-content/uploads/2022/05/2022-05-23-CDT-Ableism-and-Disability-Discrimination-in-New-Surveillance-Technologies-report-final-redu.pdf>.

⁴ Brown, *supra* n. 3, at 8-11.

⁵ Hannah Quay-de la Vallee & Natasha Duarte, Ctr. for Democracy & Tech., *Algorithmic Systems in Education* 6 (2019), <https://cdt.org/insights/algorithmic-systems-in-education-incorporating-equity-and-fairness-when-using-student-data/>.

address social, financial, and environmental factors that could affect this data, such as food and housing insecurity and other barriers to health care and reasonable accommodations that can affect the data used to predict academic success.⁶ For example, housing and food insecurity can inhibit students' ability to concentrate and complete school assignments, and untreated or unmanaged health conditions can limit school attendance. If a student has previously been denied access to suitable accommodations, their past grades and test scores may not reflect how well they would perform if given suitable accommodations.

Employment

Employers deploy algorithm-driven tools to evaluate job applicants, generally based on long-standing hiring patterns and preferences. The tools are intended to help employers identify candidates who demonstrate that they have certain attributes in common with “successful” employees and that they would align with employers’ work cultures.⁷ These tools include:

- Personality and aptitude tests: These tests can take the form of gamified assessments or can require applicants to react to a series of questions or images. Different disabilities or cultural backgrounds may affect how a candidate displays certain personality traits, like optimism or confidence, so personality tests only gauge how well a candidate “performs” a personality trait.⁸ The result of aptitude tests can also be less reliable because they may not reflect how a candidate will demonstrate desired skills in the job position itself, especially when they are given reasonable accommodations.⁹
- Resume screening tools: These tools can scan resumes for keywords that are common in previously successful job applications, overlooking other information in resumes that indicates that candidates possess attributes that those keywords are intended to capture.¹⁰ Resume screeners can also flag details such as employment gaps as areas of concern without context for those details. This practice can disadvantage candidates, for example, who have caregiver responsibilities, whose

⁶ See American Public Health Association Center for School, Health, and Education, *Chronic Stress and the Risk of High School Dropout* (2018), https://www.apha.org/-/media/files/pdf/sbhc/chronic_stress.ashx.

⁷ Ctr. for Democracy & Tech., *Algorithm-Driven Hiring Tools: Innovative Recruitment or Expedited Disability Discrimination?* 6-7 (2020), <https://cdt.org/wp-content/uploads/2020/12/Full-Text-Algorithm-driven-Hiring-Tools-Innovative-Recruitment-or-Expedited-Disability-Discrimination.pdf>.

⁸ *Id.* at 8, 12.

⁹ *Id.* at 12.

¹⁰ *Id.* at 11.

resumes reflect past experiences with disability discrimination in education or employment, or whose resumes indicate a connection to affinity groups or causes related to racial, ethnic, or gender identity.

- Interviews that use facial and video analysis: These tools analyze candidates' vocabulary, speech patterns, tics, facial expressions, limb movements, and eye contact while candidates respond to interview questions. There are well-demonstrated shortcomings in the ability of facial analysis to accurately recognize darker skin tones especially in women.¹¹ Facial and voice analysis can also misinterpret the data points they collect so as to discriminate against disabled candidates whose physical, cognitive, and mental health disabilities can affect how they move, speak, and emote.¹²

Beyond hiring, algorithmic management systems are often used in physical workplaces like office facilities and warehouses and in remote settings like home offices and gig work. These tools aim to monitor worker performance and improve productivity by tracking workers' location and movements, the time workers spend completing certain tasks, and the time spent off task.¹³ Some tools also involve sentiment analysis to evaluate workers' customer service conversations, and algorithms that set the number of deliveries gig drivers can make and income they can earn.¹⁴ These tools can pressure workers to meet unreasonable production rates, prevent especially disabled, older, and pregnant workers from taking bathroom and other breaks, and increase workers' risk of physical and mental health injuries.¹⁵

Housing and credit

Tenant screening companies and lenders turn to algorithm-driven processes to assess whether applicants will satisfy their obligations with respect to the housing or credit opportunity if approved. Lending and tenant screening algorithms perform background and credit checks to

¹¹ See Joy Buolamwini & Timnit Gebru, Gender Shades: Intersectional Accuracy Disparities in Commercial Gender Classification, 81 Proceedings of Machine Learning Research 2 (2018), <http://proceedings.mlr.press/v81/buolamwini18a/buolamwini18a.pdf>.

¹² *Id.* at 8-9.

¹³ See Aiha Nguyen, Data & Soc., The Constant Boss: Work Under Digital Surveillance 12-13 (2021), https://datasociety.net/wp-content/uploads/2021/05/The_Constant_Boss.pdf.

¹⁴ See Matt Scherer, Ctr. for Democracy & Tech., Warning: Bossware May Be Hazardous to Your Health 15-16 (2021), <https://www.vice.com/en/article/88npjv/amazons-ai-cameras-are-punishing-drivers-for-mistakes-they-didnt-make>.

¹⁵ See Scherer, *supra* n.5, at 12.

predict whether applicants will make regular payments on time,¹⁶ and in the case of tenant screening, to predict whether applicants will pose any threat to landlords' property or other tenants.¹⁷ These systems use a range of applicant data, from credit history to criminal record data to employment history and income.¹⁸

These tools, too, can discriminate against certain individuals. Some people are from overpoliced neighborhoods where more frequent calls to, and patrolling by, police – and the use of nuisance laws to evict victims following domestic violence-related police calls – means those people are more likely to have criminal record data that is not necessarily an accurate predictor of their behavior.¹⁹ Similarly, past barriers to employment history and securing credit do not always convey applicants' current ability to make payments – and assuming that they do is a self-fulfilling prophecy, as people who were not able to secure credit in the past are assured they can never secure it in the future. Further, negative data, such as missed payments, adversely affects the results of background and credit checks, but data that reflects more positively on applicants, such as on-time payments, does not mitigate these adverse effects.²⁰ Therefore, these algorithm-driven processes are more likely to deny applicants such as those who are from overpoliced low-income and predominantly Black and immigrant neighborhoods, whose disabilities have been met with police use of force, or who have been prevented from building their credit history due to systemic barriers.²¹ This is especially problematic in jurisdictions like D.C. where wealth inequity and disparities in housing quality are especially evident.

¹⁶ Will Douglas Heaven, *Bias Isn't The Only Problem With Credit Scores—and No, AI Can't Help*, MIT Tech. Rev. (June 17, 2021),

<https://www.technologyreview.com/2021/06/17/1026519/racial-bias-noisy-data-credit-scores-mortgage-loans-fairness-machine-learning/>.

¹⁷ https://georgetownlawtechreview.org/wp-content/uploads/2022/02/Leiwant_Locked-Out_Formatted.pdf.

¹⁸ Emmanuel Martinez & Lauren Kirchner, *The Secret Bias in Mortgage Approval Algorithms*, The Markup (Aug. 25, 2021, 6:50 am),

<https://themarkup.org/denied/2021/08/25/the-secret-bias-hidden-in-mortgage-approval-algorithms>; Lauren Kirchner, *Can Algorithms Violate Fair Housing Laws?*, The Markup (last updated Jan. 27, 2021, 11:43 am),

<https://themarkup.org/locked-out/2020/09/24/fair-housing-laws-algorithms-tenant-screenings>.

¹⁹ Jenny Kutner, *Domestic Violence Victims Can Be Evicted for Calling Police. Here's Why.*, Mic (Jul. 14, 2016), <https://www.mic.com/articles/148484/domestic-violence-victims-can-be-evicted-for-calling-police-here-s-why>.

²⁰ Martinez, *supra* n. 18.

²¹ 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),

<https://cdt.org/insights/tenant-screening-algorithms-enable-racial-and-disability-discrimination-at-scale-and-contribute-to-broader-patterns-of-injustice/>; Ctr. for Democracy & Tech., *Comments to Federal Financial Regulators on Financial Institutions' Use of AI and ML 4-5* (2021), <https://cdt.org/insights/taking-a-hard-line-on-ai-bias-in-consumer-finance/>.

Increasing accountability for algorithmic discrimination

The algorithms used in all of these areas are black-boxes that are sorely lacking in transparency and accountability. Partly as a result, enforcement of existing anti-discrimination laws to date has not kept up with developments in algorithm-driven decision-making. The DC Council should provide DC residents additional protections and the SDAA contains a number of substantive provisions that would do so and that CDT supports.

The SDAA prohibits the use of algorithmic decision-making to deny – or that has the effect of denying – access to critical opportunities or information based on several protected characteristics, including disability. Further, the bill establishes transparency requirements for algorithm-driven systems including the following:

- Notify customers about how personal information is used in algorithm-driven decisions to determine access to important life opportunities and why an adverse decision was made, in a way that is easy to access and available in plain language and non-English languages;
- Audit for disparate impact based on numerous protected classes, with specific factors that the audit must examine, and implement measures to mitigate identified risks of disparate impact; and
- Report to the D.C. Office of the Attorney General about the types of decisions a system makes and the performance metrics and methodologies used by companies to gauge accuracy of the algorithm.

Algorithm-driven decisions can cause a significant amount of harm to marginalized communities. Substantive legal requirements are necessary to protect against these harms. CDT urges the D.C. Council to pass legislation that is scoped to protect D.C. residents from algorithmic harms. Doing so would not only prevent a significant amount of harm in the District, but also raise the bar for other jurisdictions to address adverse impacts of algorithm-driven decision-making affecting their residents as well. CDT looks forward to engaging with the Council as it addresses this issue.