Testimony of the New York Civil Liberties Union
Before the New York Assembly Standing Committee on Labor and the New York Assembly Standing Committee on Science and Technology Regarding The Impact of Artificial Intelligence on the Workforce

October 19, 2023

The New York Civil Liberties Union (“NYCLU”) respectfully submits the following testimony regarding the Impact of Artificial Intelligence on the Workforce. The NYCLU, the New York affiliate of the American Civil Liberties Union, is a not-for-profit, non-partisan organization with eight offices throughout the state and more than 180,000 members and supporters. The NYCLU’s mission is to defend and promote the fundamental principles, rights, and values embodied in the Bill of Rights, the U.S. Constitution, and the Constitution of the State of New York. The NYCLU works to expand the right to privacy; increase the control individuals have over their personal information; increase transparency and accountability in the use of algorithms, artificial intelligence (“AI”), and automated decision-making technologies; and ensure that civil rights and liberties are enhanced rather than compromised by technological innovation.

There are myriad ways that AI impacts the workforce – from workplace surveillance technologies, like remote monitoring, location tracking, keystroke and mouse-click loggers, sophisticated camera and sensor technology, and scientifically dubious systems that purport to measure emotional states and vocal characteristics, to automated decision systems that are used to assist in hiring and other employment decisions. While AI can impact workers in just about any industry,

[low-wage and hourly work—including in restaurant, retail, logistics, warehousing, agriculture, hospitality, domestic work, and healthcare—is more susceptible to datafication because these jobs’ tasks are easily measured. These workers are also often immigrants, women, and people of color, populations historically facing higher scrutiny and levels of surveillance and monitoring.]

Workplace surveillance enables employers to collect troves of personal information about workers, including health data, religious practices, family structure, race, gender, sexuality, nationality, and immigration status\(^2\) – most often without workers’ informed or meaningful consent. Workers who already face marginalization are most likely to bear the brunt of workplace surveillance that is used to impose standardized expectations of behavior or to flag “atypical” behavior. For example, workers with physical disabilities may move in ways that an automated video surveillance system identifies as suspicious. Immigrant workers subjected to speech-recognition systems may talk with accents that an algorithm may not accurately decipher. A tracking system that relies on facial recognition may not recognize workers with darker skin.

When AI – whether through surveillance or gamification (technology that is meant to incentivize employees to work harder or longer “using video game elements, such as digital points, badges, and friendly competition.”\(^3\)) – is used to increase the pace of work, discourage workers from taking breaks, or penalize workers who take breaks, the results often discriminate against disabled workers, including those with arthritis, musculoskeletal disorders, chronic pain, ADHD, and heart conditions, as well as pregnant and lactating workers, because these workers may require more frequent breaks.\(^4\) This outcome is predictable, because these systems often set productivity expectations based on the pace of non-disabled workers.

Automated decision systems (“ADS”) – software tools or processes that automate, replace, or aid human decision-making – are a particularly perilous form of workplace AI, and, for that reason, the bulk of this testimony will focus on these systems. ADS are widely used to administer services, allocate resources, and make significant and consequential inferences about individuals, groups, or places. Whether across government agencies or in private businesses, their ubiquity and opaque deployment risk severely undermining the civil, human, and privacy rights of New Yorkers. While this testimony will focus on the use of ADS in employment decision-making, it includes footnotes sharing pernicious examples of ADS use in other contexts that the Legislature should also explore.

The risk of negative outcomes associated with ADS use is often compounded by a power imbalance between those deploying ADS and those affected by its use, particularly given


\(^3\) Tae Wan Kim, Gamification of Labor and the Charge of Exploitation, J. OF BUSINESS ETHICS 152(1), (Sept. 2018).

that ADS operate without transparency or even the most basic legal protections. Especially where New Yorkers’ fundamental rights and human needs are at stake – such as in employment, housing, public benefits, education, health care, the family regulation (or child welfare) system, or the criminal legal system – these technologies all too often replicate and amplify bias, discrimination, and harm towards populations who have been and continue to be disproportionately impacted by bias and discrimination: women, Black, Indigenous, and all people of color, religious and ethnic minorities, LGBTQIA people, people living in poverty, people with disabilities, people who are or have been incarcerated, and other marginalized communities. Transparency, auditing, and careful regulation of ADS have become necessary to counter these outcomes. Where ADS is used to make significant life decisions, it is critical that people are informed about the presence of ADS tools and have meaningful opportunities to contest the results of the tools, as well as meaningful opportunities to opt-out of its use.

Like many of the aforementioned high-stake areas, use of ADS in employment advertising, screening, recruitment, interviewing, and hiring is in urgent need of transparency, oversight, and regulation. Job applicants should not need to worry about being screened by a racist, ableist, or sexist algorithm when seeking employment.

Automated Employment Decision-making Systems (“AEDS”) result in determinations that impact New Yorkers’ ability to equitably enjoy professional opportunities and their ability to earn a livelihood to support themselves and their loved ones. The New York State legislature must act to provide transparency and accountability to automated employment technologies and ensure that AEDS do not operate to digitally circumvent New York’s laws against discrimination.

**The Need for Regulation of Automated Decision Systems**

While the use of ADS undoubtedly boosts speed and scale, such efficiency is only valuable if the underlying decisions are desirable. ADS can also have the dangerous effect of increasing the speed and scale of discriminatory and flawed decision-making. Even with the little public information available about ADS code and training data, researchers and experts consistently reveal ADS’ failures of accuracy and neutrality. Many studies have challenged their opaque or “black box” operation⁵ and provided evidence of harmful,⁶ discriminatory,⁷

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⁵ See e.g. CATHY O’NEIL, WEAPONS OF MATH DESTRUCTION: HOW BIG DATA INCREASES INEQUALITY AND THREATENS DEMOCRACY (2016); FRANK PASQUALE, THE BLACK BOX SOCIETY (2015).
sexist, sexist, ableist, and racist outcomes.

Software systems are often wrongly perceived as more neutral than humans or as offering a scientific and objective truth. Their proponents are able to make these assertions because the vast majority of ADS are opaque systems, secretly deployed and shielded from independent review due to their proprietary nature. This secrecy obscures the potential errors, outright flaws, biased data, subjective decisions, and personal choices that find their way into these systems. Every ADS is a product of human design, input, and operation.

Examples abound. When Amazon trained a resume screening algorithm on ten years of its own hiring data, the algorithm became biased against female applicants. The purpose of the algorithm was to review and analyze submitted resumes and suggest the best candidates. Instead, the algorithm ranked applications that contained the word “women” lower in the pool. This is not surprising, as most engineers that Amazon had previously hired were male and the algorithm was fed data about those engineers’ resumes. The algorithm simply learned to replicate the patterns of prior, and potentially biased and flawed, human decision-making. Similarly, another well-known employer wanted to maximize worker tenure, and the algorithm it initially deployed was reported to have found that distance from work was the most important variable. However, this factor was also strongly correlated with race.

Further, employment ad targeting algorithms can discriminate in deciding who gets to see job opportunities. For instance, it was discovered that an ad targeting algorithm used on the.

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Facebook platform tended to deliver notices about employment opportunities along racial or gender lines, leading to potentially discriminatory access to and knowledge about those opportunities.\textsuperscript{15}

Additionally, the use of face recognition technology in video hiring processes poses risks to people with disabilities, people with non-white complexions, and to people with culturally diverse backgrounds. When the technology does not recognize a face or facial expressions, it may reject or deprioritize people.\textsuperscript{16} In fact, the U.S. Department of Justice and the Equal Employment Opportunity Commission have issued guidance to employers to exercise caution before using common algorithmic tools in hiring because those tools could run afoul of civil rights laws, including the Americans with Disabilities Act.\textsuperscript{17}

Obtaining access to ADS’s underlying source code and data is difficult and resource intensive, but absolutely critical to understanding the extent to which errors occur and whether they are likely to cause discriminatory harm.\textsuperscript{18} Many automated systems purport to predict the future by observing the past.\textsuperscript{19} Even those who philosophically agree with using past statistics to predict future individual human behavior acknowledge that the value of such a predictive system lies in the value of the data input into it. When an ADS deploys

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\item \textsuperscript{18} For example, it was revealed that a Medicaid ADS in Arkansas had failed to correctly assess care needs of patients with cerebral palsy or diabetes: a fact only discovered through lengthy litigation and subsequent disclosure of the code. Litigating Algorithms 2018, AINOW INSTITUTE, https://ainowinstitute.org/litigatingalgorithms.pdf. And, in New York City, an independent review of the source code of a DNA analysis tool used by the office of the chief medical examiner raised serious questions about its validity, including whether the code may have been intentionally skewed to create more matches. Lauren Kirchner, Thousands of Criminal Cases in New York Relied on Disputed DNA Testing Techniques, PROPUBLICA (2017), https://www.propublica.org/article/thousands-of-criminal-cases-in-new-york-relied-on-disputed-dna-testing-techniques.
\item \textsuperscript{19} Among them are “risk assessment tools,” designed to use past policing and court data to “predict” the future behavior of an individual criminal defendant. Specifically, risk assessment tools attempt to determine which attributes are shared by people who previously failed to show up to court. Certain weights are placed on each of the attributes to produce a formula and “score” a person’s future risk of flight. Risk assessment tools reflect a troubling philosophy toward criminal justice policy: Using past cases to determine what might happen in future cases disregards time-specific influences that may have affected prior case outcomes and freezes a government judgment in the realities of the past. Critically, it also strips the person who is awaiting trial of independent agency and the ability to make the case that they will appear in court.
\end{itemize}
machine learning that relies on large historic datasets to train the underlying models, the quality of that underlying data is of paramount importance. If that data includes false or biased data, every output will repeat this pattern and in turn result in false and biased decision-making.\(^{20}\) This behavior is commonly known by the computer-science idiom “garbage in, garbage out,” or in this scenario, as Sandra Mayson coined, “bias in, bias out.”\(^{21}\) And where these systems operate in the dark, people may not even realize that they are suffering at the hands of a flawed machine-learning system.\(^{22}\)

Given these enormous human impacts that automated systems make on our communities—and the very real possibility of simply automating existing human error and bias—meaningful regulation is the bare minimum our democracy demands. The growing power imbalance between people affected by ADS and those who deploy them is at its height when affected people are not even aware that their lives have been impacted by an ADS. Access to information about what systems are in use, the datasets used to train them, the output variables that are measured, whether their accuracy has been studied and their impact assessed, and the mechanisms to obtain redress for harm is essential for the public to be able to engage in a fully-informed discussion regarding what role—if any—these systems should have in our society.

**A.567/S.5641**

A.567 (Joyner)/S.5641 (Comrie) would require any business using ADS for employment screening in New York to perform a type of bias audit known as a “disparate impact assessment” and empower both the New York Labor Department and the Attorney General to investigate and take certain enforcement measures. The bill would also require employers to publicly release summaries of their disparate impact assessments. While the bill laudably attempts to tackle bias in automated employment decision systems,


unfortunately, as currently drafted, it would not create meaningful protections for job applicants but would instead give cover to vendors to continue to sell discriminatory systems. We encourage sponsors to strengthen the bill in the following ways, and we are eager to work with sponsors to amend the legislation to live up to its promise.

As currently drafted, A.567/S.5641 would only cover a subset of AEDS, because the bill is drafted to include only the filtering of preferred candidates. Instead, it should include all applicants and employment decisions, including the rejection, removal, and rating of candidates. In addition, the bill should be amended to apply to the sale of AEDS, as well as its implementation or use.

Moreover, the bill’s specifications related to the mandated bias audit are too limited, giving too much leeway to vendors and therefore risking a biased bias audit. The legislation does not specify the entities who would conduct the bias audits. If vendors are left to their own devices, these audits will hold little value and will suffer from their own biases – vendors have a financial incentive to conduct the audits in-house or to contract with friendly third parties and report no bias. Instead, the bill should clearly set out an independent process developed by experts and stakeholders to ensure meaningful testing and assessment as well as mandatory disclosures to the public.

Any proper bias audit should also state the origin of the data used for the statistics reported, including where the data was gathered from, by who, when, and how it was processed. It should also provide justification for why the source of the data for the bias audit model population is believed to be relevant to a particular deployment of the AEDS.

Furthermore, employers should be required to publish bias audits in their entirety. Published results also should include clear indicators about the parameters of the AEDS as audited, and the legislation should make it clear that employers may not use the AEDS in a manner that materially differs from its audited use. This includes how input data is gathered from candidates or employees compared to how the comparable input data was gathered from the model population used for the bias audit. For example, if testing of an AEDS used a specific cutoff or weighting scheme, the cutoff or weighting scheme used in the actual deployment should match it as closely as possible, and the publication should indicate any divergence and the reason for it. A tool that may not show a disparate impact when cut offs or rankings are set at one level may show a disparate impact when cut offs are set at other levels. Likewise, if one input variable is hours worked per week, the model population for the bias audit derives those figures from internal payroll data, but candidate data will come from self-reporting, then the publication should indicate that divergence and provide commentary

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on the reason for the divergence and an assessment of the impact the divergence is likely to have on the relevance of the bias audit.

In addition, the published audit results must be disclosed in machine readable and ADA compliant formats accessible to people with various assistive technologies.

Moreover, the legislation should require employers to notify candidates – in advance of the use of an AEDS – that AEDS will be used in their hiring process and to explain to candidates what AEDS is, which job qualifications and characteristics its AEDS will assess, and how those qualifications and characteristics relate to the job or function the employee is expected to perform – and AEDS should only be permitted to assess functions that are directly related to the job a candidate has applied for. The bill should clarify that candidates must be provided with as much information as necessary to meaningfully evaluate the impact the AEDS will have on them and whether they need to request an alternative selection process or accommodation.24

Along those lines, the bill should also require that the employer allow a candidate to request an alternative selection process or accommodation, particularly for disabled candidates who may be disproportionately disadvantaged by an AEDS. It should provide employers with parameters of how to provide alternative selection processes or accommodations, including what processes may be used to give equal and timely consideration to candidates who are assessed with accommodations or through alternative processes. And candidates should be able to request human review of a AEDS’ decision or recommendation.

In order to ensure that a new law provides meaningful protections for job candidates, it must include a private right of action for impacted applicants. Without it, the legislation is unlikely to be enforced because the Attorney General and Department of Labor face all-too-real capacity limitations.25 Furthermore, the Legislature should mandate the provision of attorneys’ fees to New Yorkers who successfully vindicate their right to be free from discriminatory employment decisions. And the legislation must include a non-retaliation provision for candidates who exercise their rights protected under the bill.

Critically, the legislation must prohibit the use of any hiring technology that results in significant discriminatory impact against any class protected under the New York Human Rights Law – simply conducting a bias audit that reveals such bias is insufficient.

The Legislature might look to the language of S.7623-A (Hoylman-Sigal), which implements many of these recommendations.

Every New Yorker has a right to know whether and how automated decision systems are impacting our lives and livelihoods. This legislation must be amended and expanded in order to deliver on its promise to mitigate bias and bring justice and equity to the world of AEDS.

**Other Recommendations**

Moreover, the Legislature must regulate ADS outside of the employment context as well. Of particular concern are ADS in government that make high-stakes decisions impacting the constitutional or legal rights of New Yorkers. The legislature should consider legislation that would require state agencies to provide basic information about every automated decision system in use. Such disclosures will help the public and policymakers alike understand the current terrain, craft better and more targeted oversight mechanisms, aid people in finding help when they feel they are unfairly impacted by an ADS-produced decision, and drive public education opportunities. Other jurisdictions have shown the feasibility of similar efforts: Amsterdam and Helsinki recently launched their respective ADS registries, listing descriptions about their governmental automated decision systems, detailed information regarding the datasets used and how they are processed, assessments for discrimination and harm, and steps for human review.26

Yet, transparency is only a first step and foundation for more comprehensive and targeted regulation. Effective action will necessarily include mandatory, independent racial, disability, and non-discrimination impact assessments; data privacy audits; and holistic consultation with domain experts and people directly affected by the consequences of any ADS – in particular from marginalized groups – prior to any ADS rollout and throughout the entire life cycle. Finally, as in the hiring context, the Legislature should recognize that technologies showing significant discriminatory impact against any class protected under the New York Human Rights Law, as well as systems that pose high risks of discrimination – *e.g.* biometric surveillance, analyzing candidates’ facial features or movements, body language, emotional state, affect, personality, tone of voice, or pace of speech – require outright bans or moratoria.

**Conclusion**

We thank the Committees for the opportunity to provide testimony and for recognizing the need for oversight and regulation of automated decision systems. The NYCLU urges the Legislature to pass legislation to create transparency and protections ensuring fair and

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equitable use of automated decision systems and stands ready to work with sponsors to ensure that A.567/S.5641 – and any subsequent ADS legislation – meets those goals.