Statement to the U.S. Senate Al Insight Forum: High Impact Al Russell Senate Office Building Washington, D.C.

Dr. Dominique Harrison Racial Equity Consultant & Co-Chair, AI Equity Lab Brookings Institution

November 1, 2023

High-impact artificial intelligence (AI), unlike other specific AI applications, must be judged by its impact and material consequences on individuals and communities. These applications can pose threats to the fundamental building blocks of opportunity and security in America if not regulated appropriately.

High-impact AI affects the safety and fundamental rights of people for which landmark U.S. legislation was developed to protect. The Leadership Conference on Civil and Human Rights states that,

"[p]eople who are marginalized because of race, ethnicity, religion, gender, sexual orientation, gender identity, immigrant status, or disability status often experience more severe and frequent harms from automated systems, yet AI is being used increasingly in high-stakes settings like health care, immigration, policing, housing, credit and lending, education, tax audits, insurance, and hiring."¹

Al systems and their underlying algorithms do not account for the preexisting inequalities experienced by communities of color, resulting in outcomes that perpetuate current injustices. Further, the lack of AI regulation for these high-impact applications can exacerbate racial and economic inequities.² A very brief review of the current AI landscape demonstrates this point.

Screening Systems Impacting Access to Employment

Employers are increasingly relying on algorithms to make personnel decisions related to interviews, hiring, or promotions. New technology companies, for instance, have built models

¹ The Leadership Conference on Civil and Human Rights, "<u>Next Steps to Advance Equity and Civil Rights in Artificial</u> <u>Intelligence and Technology Policy</u>," Washington, DC, June 13, 2023).

² Olga Akselrod, "<u>How Artificial Intelligence Can Deepen Racial and Economic Inequities</u>," American Civil Liberties Union, July 13, 2021.

based upon large datasets containing "thousands of bits" of information about individual attributes and behaviors both on and offline which claim to help employers recruit workers, screen for qualified candidates, and predict an individual's likelihood of success at a particular job. These new tools are what is called workforce analytics or people analytics and they can facilitate discriminatory human resource management and practices.

Data discrimination in human resource management can take shape in many forms. Pauline Kim explains that data discrimination in employment can include:

- 1. when an employer uses data analytics to intentionally discriminate against a protected group;
- 2. errors in an individual's record that leads to the denial of an employment opportunity; or
- 3. data models that are statistically biased and systematically disfavor a protected class because of the way the underlying model was created.³

Latanya Sweeney's research has also shown that Google searches that learn from patterns in user's search behaviors can also produce discrimination in online (job) advertisement delivery.⁴ The distribution of online ads to promote jobs have demonstrated racial and gender differences in the delivery of ads to jobseekers. Numerous investigations indicate that platform companies allow advertisers to target users by race and gender despite federal laws that prohibit racial discrimination in employment.

It is difficult to understand the impact of these technologies on employment opportunities because information about how developers create these algorithms is proprietary and personnel data is confidential. While research on discrimination by algorithmic decision-making is mostly unexplored in the human resource management context, emerging examinations by scholars, civil rights groups, and think tanks highlight the urgent need for further exploration to identify specific individuals who experience harm caused by these technologies and the need for government intervention.

Screening Systems Impacting Access to Lending and Credit

Housing Sector. Algorithms are routinely used in housing practices including decisions to approve or deny home loans, online advertising for home sales and rentals, and calculating the price of home insurance. More recently, automated valuation models (AVMs) have played more of a significant role in mortgage lending where their use and influence are growing.⁵ And even though these technologies have advantages compared to traditional appraisals conducted by humans, they are not free of bias.

³ Pauline T. Kim, <u>Data-Driven Discrimination at Work</u>, *William & Mary Law Review* 58, no. 3 (February 1, 2017): pp 857-963.

⁴ Latanya Sweeney, "Discrimination in Online Ad Delivery," Harvard University, January 28, 2013).

⁵ Alex Engler and Sylvia Brown, "<u>Governing the Ascendancy of Automated Valuation Models</u>," Brooking Institution, October 12, 2023.

While some studies have found that algorithms could mitigate existing discrimination in housing, the history of racial segregation in American housing policy creates a serious risk that algorithms, even if they are not motivated by bias, will mirror, and exacerbate discriminatory housing practices and further entrench racial discriminatory of the past.⁶

While the mortgage lending companies who use and develop this technology may not be intentionally racist, the proxy variables they use may very likely result in discrimination based on America's history of redlining, blockbusting, racial zoning, restrictive covenants, and racial steering. Using algorithmic-based mortgage lending systems that do not account for structural inequity can perpetuate discrimination.

Credit and Lending Sectors. In the consumer financial marketplace, algorithms are used as a method to assess individuals' credit history to determine loan approval and pricing decisions. Credit scoring companies use payment history, amounts owed, and length of credit history, among other factors in their AI model to determine creditworthiness.

While lending decisions are officially made by loan officers at credit and lending institutions, they are largely driven by AI software. The use of data in credit noticeably expanded in 2006, as a new generation of companies known as "fintech" or financial technology entered the industry. Fintech significantly increased the volume of data inputs creditors considered in evaluating borrowers.

Individuals with no credit history or credit history that is too scarce or "thin" to generate a credit score face significant challenges in accessing most credit markets, including reduced access to credit. As a result of such harms, there is a growing effort to use alternative data – information used to evaluate creditworthiness that is not usually part of a credit report to expand access to credit and lending. However, using alternative data may present a great risk of discrimination if new variables or factors are more closely related to race, ethnicity, or gender.

Given that many measures of creditworthiness disadvantage already marginalized people, machine-learning algorithms may continue to perpetuate and exacerbate existing systemic discrimination in lending.

Responsible Innovation, Risk-Based Regulation

Al presents both great promise and great risk. Al systems promise to make routine processes more efficient and can generate more accurate decisions, and at the same time, Al is also used to classify consumers as worthy of specific benefits and opportunities.

Al systems possess an inherent socio-technical character, signifying that they are shaped by societal dynamics and human conduct. While Al systems and designers may be more blind to

⁶ Michael Akinwumi, John Merrill, Lisa Rice, Kareem Saleh, and Maureen Yap, "<u>An AI Fair Policy Lending Agenda for</u> <u>the Federal Financial Regulators</u>," Brookings Institution, December 2, 2021.

the social complexities of our nation (inequality, diversity, power structures), Congress should not allow this blindness to inform and drive technological development:

- Civil rights should be brought to the forefront of AI and technology policies to actively work to address the systemic harms of these technologies. Therefore, AI and other automated systems should be designed, developed, and deployed in a manner that advances fairer more inclusive systems that are safe and secure.
- A risk management framework can serve as a valuable guide to establishing a structured approach that balances the risks associated with AI while safeguarding consumer rights and the civil and human rights of individuals. High-impact applications are especially important because of the individual and collective harms and biased outputs that threaten the progress of our nation.
- The EU's approach to regulating all high-risk AI systems used for impactful socioeconomic decisions is a path the U.S. should continue to explore. These high-impact applications should meet standards of "data quality, accuracy, robustness, and nondiscrimination, while also implementing technical documentation, record-keeping, a risk management system, and human oversight."⁷
- Congress should develop legislation that enables broad regulatory authority coverage over many types of AI systems, including high-impact systems, tailored to specific applications. Our nation needs the adoption of harmonized rules for the design, development, and deployment placed on the market and the use of high-impact AI systems. This approach can enable future cooperation between the U.S. and the EU on AI regulation.
- U.S. federal agencies should work closely with standards bodies such as the National Institute of Standards and Technology (NIST) to develop AI regulatory plans. And these plans should be used by Congress to design strategic broad AI governance. These agencies must have a clear path to agency rulemaking authority, strong enforcement, and the availability of effective legal redress for AI applications within their domains.
- Specific requirements of high-impact AI should be developed in consultation with a broad range of stakeholders to ensure that they are effective at protecting the public's interests to ensure that AI benefits everyone. These AI Insight Forums can provide an invaluable opportunity to ensure that the voices that have too often been left out of these conversations are heard right from the start. Such kinds of collaboration between academia, industry, and government enable a more robust legislative process.

⁷ Alex Engler, "<u>The EU and U.S. Diverge on AI Regulation: A Transatlantic Comparison and Steps to Alignment</u>," Brookings Institution, April 25, 2023.