Triple A: The Case for the Algorithmic Accountability Act

By David W. Helton

**Resolved: *The United States federal government should substantially reform the use of Artificial Intelligence technology***

Case summary: Facebook, Amazon, and Google are some of the most well-known examples of companies who use artificial intelligence (AI) algorithms to hire workers, show certain ads, and mine data. Other companies and industries also use AI algorithms to make decisions. Banks use them to detect fraudulent transfers, social media platforms use them to filter inappropriate or unwanted content, and hospitals use them to analyze data and to diagnose illnesses. But what happens when Amazon’s hiring algorithm discriminates against women? Or when Facebook uses a housing ad algorithm that discriminates against minorities and veterans? Sure you can just sue the company, but that’s expensive and usually ineffective. That’s where H.R. 2231, the Algorithmic Accountability Act of 2019, comes in. The Algorithmic Accountability Act is targeted towards large companies who hold many people’s data. The act requires companies who have more than $50 million in revenue, or who have more than one million people’s data, to conduct mandatory impact assessments on their “high risk” automated decision systems, which includes machine learning, data processing, and other AI systems. These impact assessments evaluate how AI algorithms are used in terms of accuracy, fairness, bias, privacy, security, use of personal data, and security information systems and stores. With more and more companies seeking to use AI in hiring and in data processing, there must be a way to ensure AI algorithms are used properly and without bias. Keep in mind that these impact assessments may be carried out by third party auditors. That means that companies can hire algorithmic auditing firms to conduct the assessments. Some companies currently audit themselves without federal intervention, but the majority are more concerned about profits than bias. This means that we need a way to ensure accountability on the part of companies, and the best way to do that is to pass the Algorithmic Accountability Act.
Section 3(d)(2)(B) of HR2231 is where the bill says enforcement is done through the Federal Trade Commission under the existing rules contained in 18 US Code Section 41.

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Triple A: The Case for the Algorithmic Accountability Act

“Facebook is discriminating against people based upon who they are and where they live.” -  Housing and Urban  Development Secretary Ben Carson. Because my partner and I believe companies, no matter how big, need to be held accountable for their actions, we support the resolution: The United States Federal Government should substantially reform the use of artificial intelligence technology.

OBSERVATION 1. Definitions

Substantial

*Merriam Webster Online Dictionary copyright 2021.* [*https://www.merriam-webster.com/dictionary/substantially*](https://www.merriam-webster.com/dictionary/substantially) *(accessed 28 May 2021)*

: considerable in quantity : significantly great

Reform

*Merriam Webster Online Dictionary copyright 2021* [*https://www.merriam-webster.com/dictionary/reform*](https://www.merriam-webster.com/dictionary/reform) *(accessed 28 May 2021)*

: to put or change into an improved form or condition

Artificial Intelligence

*Merriam Webster Online Dictionary copyright 2021.* [*https://www.merriam-webster.com/dictionary/artificial%20intelligence*](https://www.merriam-webster.com/dictionary/artificial%20intelligence) *(accessed 28 May 2021)*

: the capability of a machine to imitate intelligent human behavior

OBSERVATION 2. INHERENCY, or the structure of the status quo. Two key facts:

FACT 1. Algorithmic bias.

Software doesn’t make unbiased decisions. It reflects the biases we program into it

Prof. Solon Barocas and Manish Raghavan 2019 (Barocas – PhD; Assistant Professor at the Dept of Information Science of Cornell Univ. Former Postdoctoral Researcher at Microsoft Research, where he was part of the Society, Ethics, and AI group. Former post-doctoral researcher at Center for Information Technology Policy at Princeton Univ. Visiting Scholar at the Center for Urban Science + Progress at New York Univ. MSc in International Relations from the London School of Economics. Raghavan - final-year PhD candidate in the Computer Science department at Cornell. B.S. in Electrical Engineering and Computer Science from UC Berkeley; member of Cornell's Artificial Intelligence, Policy, and Practice initiative and the Mechanism Design for Social Good working group on Bias, Discrimination, and Fairness.) 6 Dec 2019 “Challenges for mitigating bias in algorithmic hiring” <https://www.brookings.edu/research/challenges-for-mitigating-bias-in-algorithmic-hiring> (Accessed 10 June 2021)

On their surface, algorithmic screening tools seem to be entirely evidence-based, making it an appealing alternative to biased human evaluations. However, there is mounting evidence that such tools can reproduce and even exacerbate human biases manifested in the datasets on which these tools are built. Data encode deeply subjective decisions and judgements; they are rarely neutral records. For example, employers choose who is included in the dataset—often by virtue of who they chose to hire in the past—and what constitutes a “good” employee. If an employer has never hired a candidate from a historically Black college or university, for example, would an algorithm know how to evaluate such candidates effectively? Would it learn to prefer candidates from other schools? Algorithms, by their nature, do not question the human decisions underlying a dataset. Instead, they faithfully attempt to reproduce past decisions, which can lead them to reflect the very sorts of human biases they are intended to replace.

FACT 2. Inadequate corporate safeguards

Most companies using AI today don’t take elimination of bias seriously enough

Appen, a private AI advisory firm, in 2020 (Appen provides or improves data used for the development of machine learning and artificial intelligence products) July 2, 2020 “How to Reduce Bias in AI” <https://appen.com/blog/how-to-reduce-bias-in-ai> (Accessed 11 June 2021)

In our 2020 State of AI and Machine Learning Report, only 15% of companies reported data diversity, bias reduction, and global scale for their AI as “not important.” While that’s great, only 24% reported unbiased, diverse, global AI as mission-critical. This means that numerous companies still need to make a true commitment to overcoming bias in AI, which is not only indicative of success, but critical in today’s context.

OBSERVATION 3. We need our Plan, to be implemented by Congress and the President

1. Congress passes HR 2231, also known as the Algorithmic Accountability Act of 2019, which we’ll sometimes call “Triple A” or “the Act”
2. Enforcement through the Federal Trade Commission under existing rules in 15 US Code Section 41.

3. Funding through existing budgets of existing agencies and general federal revenues. Plan is purely legislative.
4. The plan is enacted 3 days after an Affirmative ballot
5. All Affirmative speeches may clarify.

OBSERVATION 4. The Solution: The Algorithmic Accountability Act. We see this in 2 sub-points

A. Triple A requires auditing to solve for bias

Mark Sullivan 2021 (Fast Company senior writer; covers emerging technology, politics, Artificial intelligence, large tech companies, and misinformation. He received his BS in Political Science and English from Creighton University. MS in journalism from Northwestern Univ.) February 11, 2021 “Fighting AI bias needs to be a key part of Biden’s civil rights agenda” <https://www.fastcompany.com/90599820/fighting-ai-bias-needs-to-be-a-key-part-of-bidens-civil-rights-agenda> (Accessed 5 June 2021)

The Algorithmic Accountability Act of 2019 proposed that companies with more than $50 million in revenues (or possession of more than 100 million people’s data) would have to conduct algorithmic impact assessments of their technology. That means companies would be required to evaluate automated systems that make decisions about people by studying the system’s design, development, and training data, in search of “impacts on accuracy, fairness, bias, discrimination, privacy, and security,” according to the language of the bill.

B. Audits are the necessary step to overcome bias

Prof. Kartik Hosanagar 2019 (John C. Hower Professor of Technology and Digital Business and a Professor of Marketing at The Wharton School of the University of Pennsylvania. Masters in Information Systems from Birla Institute of Technology and Sciences, India, MPhil in Management Science;PhD in Management Science and Information Systems from Carnegie Mellon Univ.) Nov 04, 2019 “Why Audits Are the Way Forward for AI Governance” <https://knowledge.wharton.upenn.edu/article/audits-way-forward-ai-governance/> (Accessed 1 July 2021)

It is clear that machine learning models that make socially or financially consequential decisions (e.g., recruiting, credit approval, ad targeting, or approval of financial transactions) need multiple lines of defense. Relying exclusively on the statistical tests conducted by the data scientists who develop the model will not suffice. A robust audit process would be the way forward for governing AI decisions.

OBSERVATION 5. The ADVANTAGES. Overcoming AI bias brings advantages over the Status Quo

ADVANTAGE 1. Business and economic benefits

1. Eliminating bias eliminates expensive liabilities and risks

Matthew Nolan 2020 (Senior Director of Product Marketing and Decision Sciences at Pegasystems, a computer software company; previously worked as a senior Product Manager in Marketing Analytics & Data Services at Harte Hanks Marketing and Advertising. Bachelors of Business Administration in Economics from State Univ. of Humboldt, Master of Business Administration from Western Governors Univ.)  July 27, 2020 “Proactively detecting and reducing AI bias” <https://www.pega.com/insights/articles/proactively-detecting-and-reducing-ai-bias> (Accessed 15 June 2021)

The problem is, self-learning algorithms are designed and trained by humans, and humans have flaws. We’re liable to pass on those flaws to the AI – intentionally or not – because of how we collect data, train models, and apply rules or logic when making decisions. We end up passing down algorithmic bias, and that becomes a huge liability – one that every business needs to be constantly aware of and pro-actively working to eliminate. Bias represents a significant financial risk for businesses in the form of regulatory violations, lost opportunities, declining revenues, increased labor costs, and the loss of public trust and reputation.

1. Billions of dollars at stake

Elizabeth Wallace 2020 (journalist; has worked as an English Language Instructor at the International English Institute and at the Nashville State Community College. MA in Applied Linguistics from the University of Massachusetts- Boston. BA in Religion and Philosophy from Shorter University) December 21, 2020 “AI Bias Can Kill a Business: Prevent It” <https://www.rtinsights.com/ai-bias-can-kill-a-business-prevent-it/> (Accessed 8 July 2021)

Even minor bias can chip away at a reputation in a climate that demands attentiveness online (always) and, at the same time, distrusts that same attention. Businesses that slip up using artificial intelligence initiatives will be hard-pressed to win back trust over even smaller breaches. The most common business use cases, such as deep learning, could account for potential billions in value if deployed correctly. Businesses already worry about adoption, with many leaders admitting that while they believe AI is critical to success, they haven’t taken full advantage. Add a layer of bias on top of that hesitancy, and businesses could lose out big in the coming years:
- misreading data for disastrous marketing results
- losing out on top talent because of AI-driven hiring practices
- missteps in performance reviews and employee culture

ADVANTAGE 2. Preventing social injustice. One link and 2 examples of people harmed by biased AI

A. The Link: Catastrophic injustice happens when biased AI gets loose

Kyle Wiggers 2021 (staff writer at VentureBeat. BS in Journalism from Ohio Univ.) June 25, 2021 “AI Weekly: NIST proposes ways to identify and address AI bias” <https://venturebeat.com/2021/06/25/ai-weekly-nist-proposes-ways-to-identify-and-address-ai-bias/>(Accessed 9 July 20201)

The effects are often catastrophic. Biases in AI have yielded wrongful arrests, racist recidivism scores, sexist recruitment, erroneous high school grades, offensive and exclusionary language generators, and underperforming speech recognition systems, to name a few injustices. Unsurprisingly, trust in AI systems is eroding. According to survey conducted by KPMG, across five countries — the U.S., the U.K., Germany, Canada, and Australia — over a third of the general public says that they’re unwilling to trust AI systems in general.

B. Job openings

Aimee Picchi 2020 (business reporter with CBS MoneyWatch and a former reporter for Bloomberg News) February 20, 2020 “Job hunters face a new hurdle: Impressing AI” <https://www.cbsnews.com/news/job-hunting-ai-is-judging-you-but-critics-say-its-snake-oil/> (Accessed 10 June 2021)

At stake are the roughly 7 million job openings that employers seek to fill each month. Traditional gatekeepers such as human resources professionals are increasingly turning to AI to review resumes — no small task when employment site Glassdoor says the average job opening receives about 250 resumes. Some are also relying on AI programs to score applicants' video interviews, with the goal of skimming the cream from the top.

C. Denial of health care

Dr. Heidi Ledford 2019 ( She is a senior reporter with Nature Research. PHD in plant and microbiology) October 24, 2019 “Millions of black people affected by racial bias in health-care algorithms” <https://www.nature.com/articles/d41586-019-03228-6> (Accessed 15 June 2021)

An algorithm widely used in US hospitals to allocate health care to patients has been systematically discriminating against black people, a sweeping analysis has found. The study, published in Science on 24 October, concluded that the algorithm was less likely to refer black people than white people who were equally sick to programmes that aim to improve care for patients with complex medical needs. Hospitals and insurers use the algorithm and others like it to help manage care for about 200 million people in the United States each year.

**END QUOTE. LATER IN THE ARTICLE THEY GO ON TO WRITE QUOTE:**

And because the algorithm assigned people to high-risk categories on the basis of costs, those biases were passed on in its results: black people had to be sicker than white people before being referred for additional help. Only 17.7% of patients that the algorithm assigned to receive extra care were black. The researchers calculate that the proportion would be 46.5% if the algorithm were unbiased.

2A Evidence: Algorithmic Accountability Act

DEFINITIONS / TOPICALITY

AI algorithm

 Alexandre Gonfalonieri 2019 (AI consultant based in Switzerland. Strategy and Innovation Consultant at Philips, an AI software and advisory company.) April 21, 2019 “What is an AI algorithm?” <https://medium.com/predict/what-is-an-ai-algorithm-aceeab80e7e3> (Accessed 6 June 2021)

“Algorithm: process or set of rules to be followed in calculations or other problem-solving operations, especially by a computer. (1)Basically, the goal of an algorithm is to solve a specific problem, usually defined by someone as a sequence of steps.”

Algorithmic bias

Richmond Alake 2020 (Machine Learning Content Creator and Computer Vision Engineer. He has worked as an AI Advisor at Genten, a private AI and animation firm. MA in Computer Vision, Machine Learning and Robotics from the University of Surrey. BA in Computer Software Engineering from Kingston Univ.) April 27, 2020 “Algorithm Bias In Artificial Intelligence Needs To Be Discussed (And Addressed)” <https://towardsdatascience.com/algorithm-bias-in-artificial-intelligence-needs-to-be-discussed-and-addressed-8d369d675a70> (Accessed 1 July 2021)

The topic of algorithm bias is important and somewhat complicated, but its definition is simple. Algorithm bias is the lack of fairness that emerges from the output of a computer system. The lack of fairness described in algorithmic bias comes in various form, but can be summarised as the discrimination of one group based on a specific categorical distinction.

Algorithmic bias happens when AI systems base decisions on faulty data or or erroneous assumptions

Mary K. Pratt updated in July 2020 (award-winning freelance journalist based in Massachusetts. Her current work focuses on enterprise technology and cybersecurity strategy and management as well as emerging technology.) last updated in July 2020 “machine learning bias (AI bias)” <https://searchenterpriseai.techtarget.com/definition/machine-learning-bias-algorithm-bias-or-AI-bias> (Accessed 6 July 2021)

Machine learning bias, also sometimes called algorithm bias or [AI bias](https://searchcio.techtarget.com/feature/Rooting-out-racism-in-AI-systems-theres-no-time-to-lose), is a phenomenon that occurs when an algorithm produces results that are systemically prejudiced due to erroneous assumptions in the machine learning process. Machine learning, a subset of artificial intelligence ([AI](https://searchenterpriseai.techtarget.com/definition/AI-Artificial-Intelligence)), depends on the quality, objectivity and size of training data used to teach it. Faulty, poor or incomplete data will result in inaccurate predictions, reflecting the "[garbage in, garbage out](https://searchsoftwarequality.techtarget.com/definition/garbage-in-garbage-out)" admonishment used in computer science to convey the concept that the quality of the output is determined by the quality of the input.

Full text of the bill is here

<https://www.congress.gov/bill/116th-congress/house-bill/2231/text>

You should print it out and bring with you to the debate round.

Summary of the bill HR2231

Congressional Research Service 2019. (non-partisan research agency of Congress) Summary: H.R.2231 — 116th Congress (2019-2020) Algorithmic Accountability Act of 2019 https://www.congress.gov/bill/116th-congress/house-bill/2231

This bill requires specified commercial entities to conduct assessments of high-risk systems that involve personal information or make automated decisions, such as systems that use artificial intelligence or machine learning. Specifically, high-risk automated decision systems include those that (1) may contribute to inaccuracy, bias, or discrimination; or (2) facilitate decision-making about sensitive aspects of consumers' lives by evaluating consumers' behavior. Further, an automated-decision system, or information system involving personal data, is considered high-risk if it (1) raises security or privacy concerns, (2) involves the personal information of a significant number of people, or (3) systematically monitors a large, publicly accessible physical location. Assessments of high-risk automated-decision systems must (1) describe the system in detail, (2) assess the relative costs and benefits of the system, (3) determine the risks to the privacy and security of personal information, and (4) explain the steps taken to minimize those risks, if discovered. Assessments of high-risk information systems involving personal information must evaluate the extent to which the system protects the privacy and security of such information.

INHERENCY

Facebook’s algorithms are biased

Jeff Horwitz 2021 (Reporter at The Wall Street Journal. He is also a financial and enterprise reporter for the Associated Press in Washington, DC. ) Updated April 9, 2021 “Facebook Algorithm Shows Gender Bias in Job Ads, Study Finds” <https://www.wsj.com/articles/facebook-shows-men-and-women-different-job-ads-study-finds-11617969600> (Accessed 11 June 2021)

Facebook Inc. disproportionately shows certain types of job ads to men and women, researchers have found, calling into question the company’s progress in rooting out bias in its algorithms. The study led by University of Southern California researchers found that Facebook systems were more likely to present job ads to users if their gender identity reflected the concentration of that gender in a particular position or industry. In tests run late last year, ads to recruit delivery drivers for Domino’s Pizza Inc. were disproportionately shown to men, while women were more likely to receive notices in recruiting shoppers for grocery-delivery service Instacart Inc.

AI amplifies bias contained in the underlying data

Sara Hooker 2021 (research scientist at Google Brain. She works on algorithm interpretability, security and model compression for accessible use of deep learning. She is the founder of Delta Analytics, a non-profit organization which is focused on training software engineers and data scientists. ) April 9, 2021 “Moving beyond “algorithmic bias is a data problem”” <https://www.sciencedirect.com/science/article/pii/S2666389921000611> (Accessed 17 June 2021)

In the absence of intentional interventions, a trained machine learning model can and does amplify undesirable biases in the training data. A rich body of work to date has examined these forms of problematic algorithmic bias, finding disparities—relating to race, gender, geo-diversity, and more—in the performance of machine learning models.

Companies lack incentive to fix algorithmic bias

Kayla Matthews 2018 (tech and productivity writer at Information Age. She is the founder of Productivity Theory, a private company specializing in helping people stay productive) Jun 21, 2018 “We Need to Talk About Biased AI Algorithms” <https://chatbotsmagazine.com/we-need-to-talk-about-biased-ai-algorithms-ead03bf964d5> (Accessed 11 June 2021)

Also, no regulations exist about the process of training an algorithm or the information companies use while doing so. That means businesses don’t worry about getting fined for releasing biased AI algorithms.

A/T “Anti-discrimination laws already exist” - Insufficient

Madhumita Murgia 2019 (Madhumita Murgia writes about technology for the Financial Times. She was previously a reporter and editor at WIRED and The Daily Telegraph. She holds a MA in Journalism from New York University. She also holds a MA in Clinical Immunology from the University of Oxford. December 11, 2019 “Algorithms drive online discrimination, academic warns” <https://www.ft.com/content/bc959e8c-1b67-11ea-97df-cc63de1d73f4> (Accessed 20 June 2021)

Existing laws are failing to protect the public from discrimination by algorithms that influence decision-making on everything from employment to housing, according to new research from the Oxford Internet Institute. Sandra Wachter, the academic behind the study, found algorithms are drawing inferences about sensitive personal traits such as ethnicity, gender, sexual orientation and religious beliefs based on our browsing behaviour. These traits are then used by online advertisers to either target or exclude certain groups from products and services, or to offer them different prices.

A/T “Anti-discrimination laws already exist”- Current laws don’t apply

Jack Corrigan 2019 (journalist on cyber and national security issues; graduated from Northwestern University with degrees in journalism and economics.) April 11, 2019 “Lawmakers Introduce Bill to Curb Algorithmic Bias” <https://www.nextgov.com/emerging-tech/2019/04/lawmakers-introduce-bill-curb-algorithmic-bias/156237/> (Accessed 6 June 2021)

“Algorithms shouldn’t have an exemption from our anti-discrimination laws,” Clarke said in a statement. “By requiring large companies to not turn a blind eye towards unintended impacts of their automated systems, the Algorithmic Accountability Act ensures 21st-century technologies are tools of empowerment, rather than marginalization, while also bolstering the security and privacy of all consumers.” Algorithmic bias remains one of the most persistent problems facing the tech community as it works to improve decision-making with data.

A/T “ Job candidates can sue” - Ineffective, candidates might not even know they were discriminated against

Jeffrey Dastin 2018 (Technology Correspondent at Reuters News Agency. He has also worked as a Legislative Intern at the United States Senate where he focused on U.S.-China relations and the Defense Department. He holds a BA in History from Yale University.) October 10, 2018 “Amazon scraps secret AI recruiting tool that showed bias against women” <https://www.reuters.com/article/us-amazon-com-jobs-automation-insight/amazon-scraps-secret-ai-recruiting-tool-that-showed-bias-against-women-idUSKCN1MK08G> (Accessed 6 June 2021)

“We are increasingly focusing on algorithmic fairness as an issue,” said Rachel Goodman, a staff attorney with the Racial Justice Program at the ACLU. Still, Goodman and other critics of AI acknowledged it could be exceedingly difficult to sue an employer over automated hiring: Job candidates might never know it was being used.

A/T “ Job candidates can sue” - Exceedingly difficult

Lauren Sarkesian and Spandana Singh, 2020 (Sarkesian - senior policy counsel at New America’s Open Technology Institute, focusing on electronic surveillance and tech privacy issues. Sarkesian served for over six years in legislative roles within the White House, U.S. Senate, and U.S. House of Representatives. J.D. from Loyola University Chicago School of Law. Singh - policy analyst with New America's Open Technology Institute. Fellow at and the Vice President of the Internet Law & Policy Foundry, as well as a Non-Resident Fellow at the Esya Centre in New Delhi.  B.A. in International Development as well as Media Studies from the Univ of California, Berkeley.) October 1, 2020 “HUD’s New Rule Paves the Way for Rampant Algorithmic Discrimination in Housing Decisions” <https://www.newamerica.org/oti/blog/huds-new-rule-paves-the-way-for-rampant-algorithmic-discrimination-in-housing-decisions/> (Accesses 16 June 2021)

Likewise, showing a “direct relation” between the injury and the defendant’s conduct, as required by the fifth element, will be exceedingly difficult when algorithms have caused the harm. A plaintiff is likely able to show an outcome (statistics) that demonstrates disparate impact, but this requirement demands that a plaintiff have knowledge of the relevant algorithm, if an algorithm is at fault, and potentially even the ability to manipulate that algorithm to show a direct relation. For such manipulation, one would need access to the code of the AI tool at the very least.

A/T “Companies are fixing AI bias” - Majority don’t study their AI tools

Rebecca Heilweil citing Adina Sterling 2019 (Rebecca Heilweil is reporter for Open Sourced, covering artificial intelligence, algorithms, and automation. She has written for Wired, Fortune, the Wall Street Journal, and the Philadelphia Inquirer, among other outlets. Adina Sterling is an organizational behavior professor at Stanford) December 12, 2019 “Artificial intelligence will help determine if you get your next job” <https://www.vox.com/recode/2019/12/12/20993665/artificial-intelligence-ai-job-screen> (Accessed 13 June 2021)

“Algorithms are good for economies of scale. They’re not good for nuance,” she explains, adding that she doesn’t believe companies are being vigilant enough when studying the recruitment AI tools they use and checking what these systems actually optimize for.

A/T “Companies are solving” - Two-thirds of companies aren’t taking action on AI bias

Jennifer Lendler, Dr. Anand Rao, and  Mitra Best 2021 (Lendler - Managing Director of Artificial Intelligence/Machine Learning & Emerging Tech at PricewaterhouseCoopers (PwC), a multinational professional services network of firms. MBA from Fuqua School of Business at Duke Univ.; was an adjunct professor in Statistics and Operations Research. Rao - Partner in PwC Advisory, with over 32 years of experience in industry and research; was Chief Research Scientist at Australian Artificial Intelligence Institute. MSc(Tech) in Computer Science from Birla Institute of Tech. & Science in India; PhD in computer Science from Univ. of Sydney; MBA from Melbourne Business School. Mitra Best is PwC’s Lead Principal for Strategic Innovation and Technology. B.S. degrees in Computer Science & Linguistics from UCLA, Graduate Management Certificate in Innovation & Strategy from MIT Sloan, Innovation Masters Certificate from Stanford.) January 18, 2021 “Understanding algorithmic bias and how to build trust in AI” <https://www.pwc.com/us/en/tech-effect/ai-analytics/algorithmic-bias-and-trust-in-ai.html>(Accessed 15 June 2021)

The fight against AI bias is filled with good intentions. Executives understand the need for responsible AI — that which is ethical, robust, secure, well-governed, compliant and explainable. A full 50% called out responsible AI in our AI Predictions 2021 survey as one of their top three priorities. And while 32% said they will focus on addressing fairness in their AI algorithms this year, over two-thirds aren’t yet taking action to reduce AI bias because it can be a thorny and unusual challenge.

A/T “Companies can fix issues on their own” - They won’t unless there are consequences. Profits are more important

Liz Webber citing Cathy O’Neil 2018 (Webber is insights editor at Enterpreneur.com; BA in History and Journalism from New York University. Masters of Science from Syracuse Univ. She is citing Cathy O'Neil, founder of O'Neil Risk Consulting & Algorithmic Auditing) September 5, 2018 “These Entrepreneurs Are Taking on Bias in Artificial Intelligence” <https://www.entrepreneur.com/article/319228> (Accessed 7 June 2021)

Most tech companies pursue profit above all else, O'Neil says, and won't seriously address the issue of bias unless there are consequences. She feels that existing anti-discrimination protections need to be enforced in the age of AI.

HARMS / SIGNIFICANCE

A/T “Bias has existed forever. Why worry about AI?” - AI spreads the impact much farther + 5 examples of AI racial bias

Dr. Damini Gupta and Dr. T S Krishnan  2020 (Gupta, Ph.D. is the Associate Vice President and Lead (AI and Fintech) at Mphasis NEXT Labs in Bangalore, India. She heads the Ethical AI initiative at the labs and has a US patent for the AI solution that aggregates and analyzes data across multiple data sources. MBA from IIM Calcutta . T S Krishnan, Ph.D. is Senior Manager at Mphasis NEXT Labs in Bangalore, India. He earned his Ph.D. from IIM Bangalore in Production and Operations Management) November 17 2020 “Algorithmic Bias: Why Bother?” <https://cmr.berkeley.edu/2020/11/algorithmic-bias/> (Accessed 15 June 2021)

The hue and cry raised about bias in algorithmic decisions does not mean humans never made biased decisions. If the biases always existed, then why bother now? Why should one care about bias in AI decision-making? Because earlier the impact of the biased decisions made by humans was localized and geographically confined. With the advent of AI, the impact of such decisions is spread on a much wider scale. The very concept of geographical boundaries is breached when we speak about an AI algorithm used to take critical decisions, the algorithms that hosted on the World Wide Web and are accessed by many. For example, if a single judge was racist his decision impacted only a few unfortunate individuals appearing in his court. On the other hand, cyber courts powered by biased AI judges adversely impacts everyone across the country. Thus, the biases in AI models have resulted in much larger impact, adversely affecting far larger groups of consumers and potential employees. Few of these examples are listed below and range from gender to racial bias.
Colored, Latino consumers are charged more vis-à-vis White consumers to purchase and refinance mortgages
Corporate hiring/recruitment biased in favor of men
Prison sentencing risk assessment biased against African Americans
Cameras with facial recognition identifying eyes of Asians as ‘closed’
Emotions (in facial recognition systems) are interpreted differently based on the person’s race

Amazon’s biased AI discriminated against hiring women job applicants

Rachel Goodman 2018 (Staff Attorney with the Racial Justice Program of the American Civil Liberties Union, graduated magna cum laude from New York University School of Law) October 12, 2018 “Why Amazon’s Automated Hiring Tool Discriminated Against Women” <https://www.aclu.org/blog/womens-rights/womens-rights-workplace/why-amazons-automated-hiring-tool-discriminated-against> (Accessed 11 June 2021)

In 2014, a team of engineers at Amazon began working on a project to automate hiring at their company. Their task was to build an algorithm that could review resumes and determine which applicants Amazon should bring on board. But, according to a Reuters report this week, the project was canned just a year later, when it became clear that the tool systematically discriminated against women applying for technical jobs, such as software engineer positions. It shouldn’t surprise us at all that the tool developed this kind of bias. The existing pool of Amazon software engineers is overwhelmingly male, and the new software was fed data about those engineers’ resumes. If you simply ask software to discover other resumes that look like the resumes in a “training” data set, reproducing the demographics of the existing workforce is virtually guaranteed.

Studies by US Dept of Commerce and Georgia Tech. Univ. find AI systematically makes decisions unfair to minorities

Jennifer Lendler, Dr. Anand Rao, and  Mitra Best 2021 (Lendler - Managing Director of Artificial Intelligence/Machine Learning & Emerging Tech at PricewaterhouseCoopers (PwC), a multinational professional services network of firms. MBA from Fuqua School of Business at Duke Univ.; was an adjunct professor in Statistics and Operations Research. Rao - Partner in PwC Advisory, with over 32 years of experience in industry and research; was Chief Research Scientist at Australian Artificial Intelligence Institute. MSc(Tech) in Computer Science from Birla Institute of Tech. & Science in India; PhD in computer Science from Univ. of Sydney; MBA from Melbourne Business School. Mitra Best is PwC’s Lead Principal for Strategic Innovation and Technology. B.S. degrees in Computer Science & Linguistics from UCLA, Graduate Management Certificate in Innovation & Strategy from MIT Sloan, Innovation Masters Certificate from Stanford.) January 18, 2021 “Understanding algorithmic bias and how to build trust in AI” <https://www.pwc.com/us/en/tech-effect/ai-analytics/algorithmic-bias-and-trust-in-ai.html>(Accessed 15 June 2021)

The definition of AI bias is straightforward: AI that makes decisions that are systematically unfair to certain groups of people. Several studies have identified the potential for these biases to cause real harm. A study published by the US Department of Commerce, for example, found that facial recognition AI misidentifies people of color more often than white people. This finding raises concerns that, if used by law enforcement, facial recognition could increase the risk of the police unjustly apprehending people of color. In fact, wrongful arrests due to a mistaken match by facial recognition software have already occurred. Another study, this one from Georgia Tech, found that self-driving cars guided by AI performed worse at detecting people with dark skin, which could put the lives of dark-skinned pedestrians at risk. In financial services, several mortgage algorithms have systematically charged Black and Latino borrowers higher interest rates, according to a UC Berkeley study.

UniBank study: AI biased against female job applicants in the finance industry

Jessie Tu 2020 (journalist) December 1, 2020 “Job hiring algorithms are disadvantaging women” <https://womensagenda.com.au/latest/job-hiring-algorithms-are-disadvantaging-women/> (Accessed 10 June 2021)

A new study from the University of Melbourne has revealed that subconscious gender biases from a range of sources leads to unfavourable outcomes for female job applicants. The study was commissioned by UniBank with an aim to deepen understanding of how artificial intelligence (AI) influences the likelihood of women being hired in finance industry roles. The findings revealed that gender bias enters the recruitment procedure at a number of different points — the main causes of bias include gender-skewed datasets, correlational bias judgements in algorithms and human decision-making.

AI bias affects: Jobs, criminal justice, loans, and vaccines. And it keeps getting worse

Alfred Ng 2021 (privacy and surveillance reporter for the Markup. He previously worked as a senior reporter for CNET, covering cybersecurity and privacy, and a reporter for New York Daily News) February 23, 2021 “Can Auditing Eliminate Bias from Algorithms?” <https://themarkup.org/ask-the-markup/2021/02/23/can-auditing-eliminate-bias-from-algorithms> (Accessed 27 June 2021)

For more than a decade, journalists and researchers have been writing about the dangers of relying on algorithms to make weighty decisions: who gets locked up, who gets a job, who gets a loan — even who has priority for COVID-19 vaccines. Rather than remove bias, one algorithm after another has codified and perpetuated it, as companies have simultaneously continued to more or less shield their algorithms from public scrutiny.

Algorithmic bias can amplify bias and discrimination instead of correcting it

Dr. Josefin Rosén 2017 (Principal Advisor in Advanced Analytics and Artificial Intelligence at the Analytics Software & Solutions (SAS) company. PhD in predictive chemistry from the Univ of Uppsala. October 16, 2017 “What every business manager should know about algorithm audits” <https://blogs.sas.com/content/hiddeninsights/2017/10/16/algorithm-audits/> (Accessed 23 June 2021)

Artificial intelligence (AI) algorithms have an increasingly central role in decision making in our society today. The algorithms learn patterns and features from the data it is fed with. Their intention is to increase efficiency and to overcome errors and biases that come with manual human decisions. However, since those algorithms is dependent on a training data set generated by a human team, they could potentially amplify bias and discrimination, instead of correcting for it. AI is only as good as the data that powers it. If biased data is fed into an algorithm - discriminatory results will follow.

Widespread impact: 55% will use AI in hiring by 2022

Jeffrey Dastin 2018 (Technology Correspondent at Reuters News Agency. BA in History from Yale.) October 10, 2018 “Amazon scraps secret AI recruiting tool that showed bias against women” <https://www.reuters.com/article/us-amazon-com-jobs-automation-insight/amazon-scraps-secret-ai-recruiting-tool-that-showed-bias-against-women-idUSKCN1MK08G> (Accessed 6 June 2021)

Some 55 percent of U.S. human resources managers said artificial intelligence, or AI, would be a regular part of their work within the next five years, according to a 2017 survey by talent software firm CareerBuilder.

Cost of bias: $765 million/year in one industry alone (mortgage lending)

Amy Scott 2019 (Marketplace’s senior correspondent covering housing and the economy. Amy has a bachelor’s degree in history from Grinnell College and a master’s degree in journalism from the University of California, Berkeley. November 12, 2019 “ <https://www.marketplace.org/2019/11/12/apples-credit-card-may-discriminate-just-like-lots-of-banking-algorithms/> (Accessed 21 June 2021)

Regulators in New York are investigating the new Apple-Goldman Sachs credit card for allegedly discriminating against women. Critics say this is just the latest example of bias in the algorithms that power so many financial decisions these days. Even when you sit down with a banker to get a mortgage, algorithms still likely affect whether you get a loan and how much interest you’ll pay. Adair Morse is an associate professor of finance at University of California, Berkeley, and studies the bias in those algorithms. She said they weigh thousands of variables, including where you went to school. “The name of your high school is correlated with wealth,” Morse said, “but it may over penalize particular ethnic groups or particular race racial groups.” Morse found that discrimination, directly from people but also from those computer models, cost African Americans and Latinos an extra $765 million a year in mortgage interest.

Faulty AI algorithms can affect hundreds of millions of people every day

Ben Dickson 2020 (software engineer and the founder of TechTalks.) June 10, 2020 “What makes AI algorithms dangerous?” <https://bdtechtalks.com/2020/06/10/ai-weapons-of-math-destruction/> (Accessed 7 June 2021)

Likewise, Facebook’s ranking algorithms decide the news that hundreds of millions of people see every day. If those algorithms are faulty, they can be gamed to spread fake, sensational news by malicious actors. Even when there’s not a direct malicious intent, they can still cause harm. For instance, news feed algorithms that favor engaging content can amplify biases and create filter bubbles, making users less tolerant of alternative views. When opaque and faulty Al algorithms determine credit scores for hundreds of millions of people or decide the fate of the country’s education system, then you have all the elements of a weapon of math destruction.

Examples of AI use, impact on everyday life: Mortgages, job interviews, criminal justice

Daniel Cossins 2018 (science writer based in London; BA in History from Sheffield University) April 12, 2018 “Discriminating algorithms: 5 times AI showed prejudice” <https://www.newscientist.com/article/2166207-discriminating-algorithms-5-times-ai-showed-prejudice/> (Accessed 8 June 2021)

Modern life runs on intelligent algorithms. The data-devouring, self-improving computer programmes that underlie the artificial intelligence revolution already determine Google search results, Facebook news feeds and online shopping recommendations. Increasingly, they also decide how easily we get a mortgage or a job interview, the chances we will get stopped and searched by the police on our way home, and what penalties we face if we commit a crime, too.

A/T “Doesn’t affect job applicants” - Machines change minds

Prof. Bo Cowgill 2020 (Assistant Professor at Columbia Business School, a research affiliate at CESifo, and a Term Member of the Council on Foreign Relations. Ph.D. from UC Berkeley) March 21, 2020  “Bias and Productivity in Humans and Algorithms: Theory and Evidence from Resum´e Screening” <http://conference.iza.org/conference_files/MacroEcon_2017/cowgill_b8981.pdf> (Accessed 10 June 2021)

After learning the machine’s choice, the human screeners agreed on 85% of non-withdrawn applications (70% of total applications). By contrast, in the control group – where human screeners were asked for independent evaluations without knowing the machine’s choice – the humans agreed on only 60% of non-withdrawn applications (50% of total applications).

SOLVENCY/ADVOCACY

Algorithmic audit methodology already exists: It’s used on environmental impact assessments

Mark Sullivan 2021 (Fast Company senior writer, covers emerging technology, politics, Artificial intelligence, large tech companies, and misinformation. BS in Political Science and English from Creighton University. MS in journalism from Northwestern Univ.) February 11, 2021 “Fighting AI bias needs to be a key part of Biden’s civil rights agenda” <https://www.fastcompany.com/90599820/fighting-ai-bias-needs-to-be-a-key-part-of-bidens-civil-rights-agenda> (Accessed 5 June 2021)

The algorithmic audit represents an approach similar to the framework used in environmental impact assessments, where public or private entities study how a new project or technology might impact nature and people.

Audits remove bias

Prangya Pandab 2021 (Associate Editor with OnDot Media; journalist with almost seven years of experience in the business news sector.) January 4, 2021 “Can AI Eliminate Bias From Decision-Making?” <https://enterprisetalk.com/featured/can-ai-eliminate-bias-from-decision-making/> (Accessed 28 June 2021)

To protect themselves against biases in algorithmic decision-making, organizations must conduct periodic audits that ensure algorithmic hygiene before, during, and after implementing AI tools. Organizations should also look at employing the right tools and platforms to provide transparency and relevant metrics. There should also focus on improving data collection through more conscious sampling and also use third parties to audit data and models.

Algorithmic audits are needed

Erika Morphy 2019 (journalist covering technology and its business implications for more than 20 years.) Aug 13, 2019 “Should Your Organization Be Auditing Their Algorithms?” <https://www.cmswire.com/analytics/should-your-organization-be-auditing-their-algorithms/> (Accessed 26 June 2021)

Besides bias, algorithms should also be audited for accuracy, said Albert Brown, SVP of engineering at Veritone. Algorithms are based on assumptions, known or otherwise, he explained. These assumptions, or patterns, are baked into the data used during the training or building of that algorithm in addition to the assumptions in the algorithm itself. “As the data changes and if the algorithm was not thought through carefully at the start, the accuracy can go from acceptable to 'worse than a coin flip,'” Brown said. “Companies should audit the algorithms to catch missing datasets and to recognize when the algorithm is not working effectively."

AAA ’19 requires audits of AI for bias and fairness

Vaidyanathan Balasubramanian 2019 (Principal Consultant in Data, Analytics, & AI at Wipro; has close to 17 years’ experience spanning analytics, AI, program management, account management, IT infrastructure, and IT services. He has worked in multiple verticals such as BFSI, Healthcare, Telecom, Manufacturing, IT operations amongst others. June 2019 “Algorithmic Accountability Act of 2019 - challenge and opportunities” <https://www.wipro.com/blogs/vaidyanathan-balasubramanian/algorithmic-accountability-act-of-2019-challenges-and-opportunities/> (Accessed 6 June 2021)

If passed in the current form, The Algorithmic Accountability Act of 2019 will mandate that all covered entities who deploy automated decision systems that affect a “consumer” will have to mandatorily conduct automated decision system impact assessments and data protection impact assessments. These assessments cover evaluation of algorithms in terms of their accuracy, fairness, bias, discrimination, privacy and security, use of personal data, security of information systems and stores.

Details about the Algorithmic Accountability Act

Adi Robertson 2019 (Senior Reporter covering technology policy, video games, virtual and augmented reality, biohacking, tech history, and other topics for The Verge since 2011. BA in China and Asia-Pacific Studies from Cornell Univ.) April 10, 2019 “A new bill would force companies to check their algorithms for bias” <https://www.theverge.com/2019/4/10/18304960/congress-algorithmic-accountability-act-wyden-clarke-booker-bill-introduced-house-senate> (Accessed 1 July 2021)

The Algorithmic Accountability Act is aimed at major companies with access to large amounts of information. It would apply to companies that make over $50 million per year, hold information on at least 1 million people or devices, or primarily act as data brokers that buy and sell consumer data.

AAA ’19 applies to high risk systems, and definition of “high risk”

Dr. Mark MacCarthy 2019 (Senior Policy Fellow at the Center for Business and Public Policy at Georgetown’s McDonough School of Business; senior fellow at the Future of Privacy Forum, where he works on AI and data privacy projects. He is an adjunct faculty member in the Communication, Culture & Technology Program in the Graduate School at Georgetown Uni. He has been a consultant on technology policy issues for the Organization for Economic Cooperation and Development and for the Aspen Institute. Ph.D. in philosophy from Indiana University and an M.A. in economics from Univ. of Notre Dame.) October 24, 2019 “An Examination of the Algorithmic Accountability Act of 2019” (ellipses in original) <https://www.ivir.nl/publicaties/download/Algorithmic_Accountability_Oct_2019.pdf> (Accessed 12 June 2021)



AAA ’19 encourages third party audits

Congress.gov 2019. (Congress.gov is the online database of United States Congress legislative information; joint project of the Library of Congress, the House, the Senate and the Government Publishing Office.) “H.R.2231 - Algorithmic Accountability Act of 2019” <https://www.congress.gov/bill/116th-congress/house-bill/2231/text> (Accessed 1 July 2021)

(1) *IN GENERAL*.—Not later than 2 years after the date of enactment of this section, the Commission shall promulgate regulations, in accordance with section 553 of title 5, United States Code, that—
(A) require each covered entity to conduct automated decision system impact assessments of—
(i) existing high-risk automated decision systems, as frequently as the Commission determines is necessary; and
(ii) new high-risk automated decision systems, prior to implementation;
provided that a covered entity may evaluate similar high-risk automated decision systems that present similar risks in a single assessment;
(B) require each covered entity to conduct data protection impact assessments of—
(i) existing high-risk information systems, as frequently as the Commission determines is necessary; and
(ii) new high-risk information systems, prior to implementation;
provided that a covered entity may evaluate similar high-risk information systems that present similar risks in a single assessment;
(C) require each covered entity to conduct the impact assessments under subparagraphs (A) and (B), if reasonably possible, in consultation with external third parties, including independent auditors and independent technology experts; and
(D) require each covered entity to reasonably address in a timely manner the results of the impact assessments under subparagraphs (A) and (B).

Advocacy - RAND Corporation supports algorithmic audits

Dr. Osonde Osoba and William Welser 2017 (Welser - director of the Engineering and Applied Sciences (EAS) Department and a senior management scientist at the RAND Corporation. Welser received his B.S. in chemical engineering from the University of Virginia, and his M.B.A. and M.S. in finance from Boston College.  Osoba is a senior information scientist at the RAND Corporation and a professor at the Pardee RAND Graduate School. He is also the codirector of the Center for Scalable Computing and Analysis. Ph.D. in electrical engineering from USC ) “An Intelligence in Our Image” <https://www.rand.org/content/dam/rand/pubs/research_reports/RR1700/RR1744/RAND_RR1744.pdf> (Accessed 17 June 2021)

Christian Sandvig’s recent work argues that the last option, the algorithm audit, should be the way forward (Sandvig et al., 2014). Certain audit types ignore the inner workings of artificial agents and judge them according to the fairness of their results. This is akin to how we often judge human agents: by the consequences of their outputs (decisions and actions) and not on the content or ingenuity of their code base (thoughts). This option makes the most sense for policymakers and sets the standard for a consequentialist ethics for artificial agents. Regulation is much easier under this framing.

Advocacy - The AI community supports algorithmic audits

Khari Johnson 2021 (Senior AI Staff Writer at VentureBeat. BA in Journalism from San Francisco State University) January 30, 2021 “What algorithm auditing startups need to succeed” <https://venturebeat.com/2021/01/30/what-algorithm-auditing-startups-need-to-succeed/> (Accessed 22 June 2021)

In recent years, we have seen proposals for numerous laws that support algorithm audits by an external company, and last year dozens of influential members of the AI community from academia, industry, and civil society recommended external algorithm audits as one way to put AI principles into action.

Advocacy - Microsoft supports impact assessments

Mark Sullivan 2021 (Fast Company senior writer; covers emerging technology, politics, Artificial intelligence, large tech companies, and misinformation. BS in Political Science and English from Creighton University. MS in journalism from Northwestern Univ.) February 11, 2021 “Fighting AI bias needs to be a key part of Biden’s civil rights agenda” <https://www.fastcompany.com/90599820/fighting-ai-bias-needs-to-be-a-key-part-of-bidens-civil-rights-agenda> (Accessed 5 June 2021)

One AI developer, Microsoft, supports federal legislation on ethical AI—at least in principle. Microsoft Chief Responsible AI Officer Natasha Crampton tells me that the impact assessment should be the starting point for looking deeply and honestly into AI’s real use cases and stakeholders. “That can really set you on the course to understand how the system might work in the real world, so that you can build in safeguards, preserve the benefits, and mitigate risks,” she tells me. Crampton says that Microsoft has been calling for legislation addressing ethics in AI since 2018.

A/T “it’s too broad” - Intentionally, and that’s a good thing

Quandary Peak Research 2020 (provides expert analysis of software and computing technology. They analyze large code bases, design documents, performance and usage statistics, and other data to answer technical questions about the structure and behavior of complex software systems)  March 11, 2020 “On Our Radar: The Algorithmic Accountability Act” <https://quandarypeak.com/2020/03/on-our-radar-the-algorithmic-accountability-act/> (Accessed 6 June 2021)

The bill is intentionally broad, with tech news outlet The Verge describing it as “[seemingly] designed to cover countless other controversial AI tools – as well as the training data that can produce biased outcomes in the first place.” Impact assessments would examine algorithms and training data for “accuracy, fairness, bias, discrimination, privacy, and security,” then require companies to address the issues that surface. Companies would also be required to examine the implications of their information systems on “the privacy and security of consumers’ personal information” – a timely addition in the era of data as currency.

A/T “Not affecting the root cause” - Big companies are the root cause

Ben Dickson 2020 (software engineer and the founder of TechTalks) October 5, 2020 “The future of AI depends on 9 companies. If they fail, we’re doomed.” <https://bdtechtalks.com/2020/10/05/review-the-big-nine-future-of-ai/> (Accessed 11 June 2021)

Many are quick to blame large tech companies for the problems caused by artificial intelligence. They’re not wrong. A few very wealthy organizations wield enormous power on how AI systems are being developed and deployed across thousands of applications and delivered to billions of devices and users. And by extension, they are responsible for many of the problems we are facing, from algorithmic bias and social media filter bubbles to privacy issues and lack of diversity.

DISADVANTAGE RESPONSES

A/T “Stifles Innovation” - Algorithmic accountability doesn’t harm innovation

Adomas Siudika 2020 (IAPP Member Contributor. Associate attorney specializing in data privacy and cybersecurity strategy at Boodell & Domanskis LLC in Chicago, IL. He serves as the firm’s Chief Information Officer. LL.M cum laude from Indiana University Robert H. McKinney School of Law.) Nov 20, 2020 “Anti-discriminatory algorithmic accountability: Transparency by design in AI-powered decision making” <https://iapp.org/news/a/anti-discriminatory-algorithmic-accountability-transparency-by-design-in-ai-powered-decision-making/> (Accessed 7 June 2021)

Algorithmic accountability is not meant to discourage or slow down the use of AI in optimizing processes for businesses and advancing digital innovation. The main objectives of algorithmic accountability are to bring more transparency in automated decision making, promote anti-bias awareness, and introduce reasonable controls to the ADS data-processing practices. Protected classes may not always be able to defend their interests when it comes to the ways information about them is processed. DATA places a burden on the users of ADS through the specific compliance steps discussed above to ensure that information identifying individuals as members of protected classes is not misused.

A/T “Stifles innovation” - Regulation enables innovation

Khari Johnson 2021 (Senior AI Staff Writer at VentureBeat. He holds a BA in Journalism from San Francisco State University. January 30, 2021 “What algorithm auditing startups need to succeed” <https://venturebeat.com/2021/01/30/what-algorithm-auditing-startups-need-to-succeed/> (Accessed 22 June 2021)

To provide clarity and avert potential harms, algorithms that impact human lives would ideally be reviewed by an independent body before they’re deployed, just as environmental impact reports must be approved before a construction project can begin. While no such legal requirement for AI exists in the U.S., a number of startups have been created to fill an algorithm auditing and risk assessment void. A third party that is trusted by the public and potential clientele could increase trust in AI systems overall. As AI startups in aviation and autonomous driving have argued, regulation could enable innovation and help businesses, governments, and individuals safely adopt AI.

A/T “Government intervention is bad” - Government intervention is needed

Jenny R. Yang 2020 (served as a nonresident fellow in the Center on Labor, Human Services, and Population at the Urban Institute. She was chair, vice chair, and commissioner of the US Equal Employment Opportunity Commission (EEOC) from 2013 to 2018; was a senior trial attorney with the US Department of Justice) February 12, 2020 “Three Ways AI Can Discriminate in Hiring and Three Ways Forward” <https://www.urban.org/urban-wire/three-ways-ai-can-discriminate-hiring-and-three-ways-forward> (Accessed 10 June 2021)

A third-party auditing system would promote accountability by employers and vendors while having flexibility to evolve with technology and protect intellectual property. The government has an important role in creating an auditing framework and core requirements for retention and documentation of technical details, including disclosing training data for review during an investigation.

A/T “AI algorithms shouldn’t be regulated” - Accountability needed

Sigal Samuel updated 2019 (Staff Writer for Vox's Future Perfect. MFA in Creative Writing from the University of British Columbia;BA in Philosophy from McGill Univ.) Updated May 29, 2019 “10 things we should all demand from Big Tech right now” <https://www.vox.com/the-highlight/2019/5/22/18273284/ai-algorithmic-bill-of-rights-accountability-transparency-consent-bias> (Accessed 6 June 2021)

In recent years, advances in computer science have yielded algorithms so powerful that their creators have presented them as tools that can help us make decisions more efficiently and impartially. But the idea that algorithms are unbiased is a fantasy; in fact, they still end up reflecting human biases. And as they become ever more ubiquitous, we need to get clear on what they should — and should not — be allowed to do.

A/T “AI algorithms shouldn’t be regulated” - Regulation reverses bias

Prof. Jon Kleinberg, Prof. Jens Ludwig, Prof. Sendhil Mullainathan and Prof. Cass Sunstein 2019. (Kleinberg - University Professor in the Department of Computer Science at Cornell University; a member of the National Academy of Sciences, the National Academy of Engineering, and the American Academy of Arts and Sciences. Ludwig is the Edwin A. and Betty L. Bergman Distinguished Service Professor, director of the University of Chicago’s Crime Lab, codirector of the Education Lab, and codirector of the National Bureau of Economic Research’s working group on the economics of crime. Ludwig previously was a professor of public policy at Georgetown University. PhD in economics from Duke University. Mullainathan is the Roman Family University Professor of Computation and Behavioral Science at Chicago Booth. Former Professor of Economics at Harvard University. Sunstein is currently the Robert Walmsley University Professor at Harvard. He is the founder and director of the Program on Behavioral Economics and Public Policy at Harvard) April 22, 2019 “Discrimination in the Age of Algorithms” Journal of Legal Analysis <https://academic.oup.com/jla/article/doi/10.1093/jla/laz001/5476086> (Accessed 3 July 2021)

Our starting point is the current American legal system that has developed a complex framework for detecting and regulating discriminatory decisions. It is increasingly clear that this framework must be adapted for regulating the growing number of questions—involving hiring, credit, admissions, criminal justice—where algorithms are now involved in how public and private institutions decide. Algorithms provide new avenues for people to incorporate past discrimination, or to express their biases and thereby to exacerbate discrimination. Getting the proper regulatory system in place does not simply limit the possibility of discrimination from algorithms; it has the potential to turn algorithms into a powerful counterweight to human discrimination and a positive force for social good of multiple kinds.