

#EqualAI

*Bulletin on Bias & Artificial Intelligence:
Issue 6, October 2020*

Spotlight of the Week: Congressman Don Beyer (D-VA)



"I took the EqualAI Pledge because I understand that we need basic safeguards and ethical principles upheld in all aspects of our society, particularly in systems supported by artificial intelligence (AI). Government has an important role to play in establishing safeguards around new technologies like AI. I am proud to serve on the AI Caucus and to have recently offered two amendments on AI and facial recognition systems. Companies must also do their part to ensure their innovations are safe for our use and do not increase or sustain discriminatory outcomes, particularly in key functions such as the allocation of healthcare resources, hiring decisions, credit and loan determinations, and criminal sentencing. I hope you will join me in taking the EqualAI Pledge because we all have a role to play in reducing bias and discrimination in our society."

- Congressman Don Beyer

Hot Topics in Business and Technology



- **Women Founders of AI Startups Take Aim at Gender Bias:** The WSJ profiled several female entrepreneurs in AI who are addressing embedded AI bias through diversifying their workforce and creating AI solutions (9/29).
- **Amsterdam/Helsinki Launch Algorithm Registries to Bring Transparency to AI:** These cities launched public datasets to increase transparency around how AI algorithms are utilized in government and offer citizens a way to offer feedback. Each algorithm cited lists datasets used to train the model, a description of how an algorithm is used, how humans utilize the prediction, and how algorithms were assessed for potential bias or risks. (9/28).
- **Amazon Sees Broad Audience for its Palm Recognition Tech:** Amazon introduced palm-recognition technology in a pair of cashier-free Amazon Go stores in Seattle, with plans of expanding the biometric technology to other secured locations. The company chose palm recognition because it is 'more private' than other biometric technology and contactless (9/29).
- **TikTok Wins Reprieve From US Ban:** TikTok was granted a preliminary injunction to pause restrictions mandated by the Trump Administration. More restrictions on US operations expected in a November Executive Order (9/27).
- **Columbia and Amazon Announce Creation of NY AI Research Center:** Amazon will donate \$5 million over the next five years to support AI research, education, and outreach programs at the new center (9/22).
- **A controversial photo editing app slammed for AI-enabled 'blackface' feature:** Photo editing app Gradient is under fire for its new 'AI Face' feature that lets people alter their images, criticized as promoting digital "blackface." (9/24).
- **These Robots Use AI to Learn How to Clean Your House:** At the Toyota Research Institute, researchers are developing robots to create a total 'smart' home, complete with robots picking up plates and loading dishwashers (9/30).
- **Facebook will ban ads supporting QAnon and militarized social movements:** Facebook said it is banning ads linked to far-right conspiracy theory group QAnon and other militarized social movements, and will ban any advertisements that aim to delegitimize an election's results (9/30).
- **Artificial Intelligence Enhances Speed of Discoveries For Particle Physics:** By comparing algorithmic simulations to the results of large-scale particle physics experiments, scientists at MIT gain more efficient feedback on how their physics models should be constrained and analyzed (9/27).



- **Drugs aren't typically tested on women. AI could correct that bias:** Researchers at Columbia University developed AwareDX, a machine learning algorithm that identifies and predicts differences in adverse drug effects between men and women by analyzing reports from over 50 years in an FDA database. The algorithm corrects for biases in these data that stem from an overrepresentation of male subjects in clinical research trials (9/30).
- **Should AI interpretation of mammograms become widespread in clinical practice?** Harvard Medical School Radiology Professor states AI imaging of mammograms should be widespread in clinical practice (9/25):
 - *“I predict with AI integration we will need more, not fewer, radiologists, and those radiologists will have higher job satisfaction and infinitely higher impact on the health of their communities. Health care workers are overwhelmed by all their work, and AI can help.” - Dr. Constance Lehman*
- **GE Releases AI-Enhanced Women’s Health Ultrasound with Industry-First Tools:** GE Healthcare unveiled its Voluson SWIFT ultrasound system, a medical device intended to improve diagnostic capabilities (9/30).

US Federal and State Government News

- **Declaration of the USA and UK on Cooperation in AI Research and Development:** Chief Technology Officer of the United States Michael Kratsios signed an agreement on AI with the UK (9/25):
 - *“We intend to establish a bilateral government-to-government dialogue on the areas identified in this vision and explore an AI R&D ecosystem that promotes the mutual wellbeing, prosperity, and security of present and future generations.”*
- **Trump vs. Biden: Comparing the Candidates’ Positions on Technology and Innovation:** ITIF published a cross comparison of the nominees’ positions on key technology policy issues. Highlights from Axios included (9/28):
 - R&D: Biden supports more investment in R&D. Trump proposed increased funding for AI, while cutting research funding overall.
 - China: Trump focuses on being tough on China and embraces a unilateral trade approach. Biden wants to be aggressive with China but favors aligning with allies on trade policy.
 - Antitrust and content moderation: Both candidates support potential antitrust actions against large tech companies and curbing Section 230 of the Communications Decency Act (CDA).
 - Privacy: Both candidates support a national data privacy bill.

- **Pentagon Is Clinging to Aging Technologies, House Panel Warns:** Despite indications that the Pentagon embraces R&D around AI, inertia around old weapons systems remains (9/29).
- **Senate Panel Authorizes Subpoenas for Top Social-Media CEOs:** The Senate Commerce Committee voted to authorize subpoenas forcing testimony from Facebook CEO Mark Zuckerberg, Twitter CEO Jack Dorsey, and Sundar Pichai, CEO of Alphabet surrounding Section 230 of the CDA (10/1).



AI Around the World

- **China: Bjarke Ingels Is Designing an AI-Based 'Smart City' in China:** Spanning over 30 acres, the AI-powered city will feature robots, futuristic technical architecture, and sustainable infrastructure (9/30).
- **Canada: Risk Levels for Automation Differ By Gender:** According to a new study by Canada's statistics agency, women face a significantly higher risk of automation-related job transformation than men (9/28):
 - *"The gap in the proportion of women and men facing a moderate to high risk of automation-related job transformation could not be explained by gender differences in personal and work characteristics, such as age, education, industry and occupation." - StatCan*
- **London: Uber Wins Back License to Operate in London:** Uber won an appeal over the revocation of its operating license in London, securing operations in one of its biggest global markets (9/28).
- **Israel: Israel's Mobileye, Dubai's Habtoor partner on self-driving cars:** Israel-based autonomous-vehicle maker Mobileye launched a partnership with the UAE's AI Habtoor Group to create a fleet of self-driving cabs (9/23).
- **Singapore: Singapore hopes AI will help boost its tourism industry:** As the country reopens to foreign travel, AI-enabled services are being developed for safer vacations, such as digital concierges and robot room service employees (9/23).
- **Japan: SoftBank brings food service robots to labour-strapped Japan:** Autonomous robots provide a solution as restaurants struggle with labor shortages and social-distancing orders (9/28).

Op-Eds: Top Picks of the Week 🤖

- **These weird, unsettling photos show that AI is getting smarter:** Models are learning how to generate images from captions, a sign that they're getting better at understanding our world (9/25).

- **Rethinking risk and compliance for the Age of AI:** The WEF evaluates new risks for businesses using AI and explain why Enterprise Audit Software systems can achieve partial risk mitigation (9/30):
 - *“[R]esponsible AI cannot be fully automated. There is no universal list of requirements that one must meet to mitigate all existing and potential risks, because the context and industry domain will often determine what items are needed. As a consequence, risk managers and their ability to exercise judgment will remain essential.”*



EqualAI Partners in the News

- **Why TikTok’s algorithm can’t be trusted:** Senior Advisor Cathy O’Neil writes:
 - *“In short, even if TikTok is transparent about how its algorithm works, and even if it has been acting benignly so far, I wouldn’t assume that it can be trusted not to engage in damaging manipulation. Why else would China want to keep control over the code?” - Cathy O’Neil (9/22)*
- **Senior Advisor Michèle Flournoy to spotlight on CSET’s upcoming webinar ‘Building Trust Through Testing’ on October 6**

Upcoming Events 🎉

- AI in Healthcare Summit, ‘Business and Academia for Innovations in Healthcare,’ co-hosted by MIT CSAIL and STEMM Global: [October 1-2](#).
- ‘Building Trust Through Testing,’ Hosted by CSET: [October 6](#).
- HAI Summit, ‘Triangulating Intelligence: Melding Neuroscience, Psychology, and AI,’ hosted by Stanford University: [October 7](#).
- 2020 Ethics of Big Data Symposium on ‘Race, Representation & Justice,’ featuring keynote speaker Ruha Benjamin: [October 7](#).
- Systems Research Group Seminar, ‘Bias in AI,’ Cambridge U: [October 8](#).
- ‘How Will Quantum Computing Shape the Future of AI?’ hosted by The Center for Data Innovation: [October 14](#).