Principles: Human oversight and determination, Transparency and explainability, Awareness and literacy
Values: Ensuring diversity and inclusiveness
Stakeholders: Private sector, Technical community

Behind the Recruitment Funnel

Automation has been essential to many companies' e-commerce model and has been using computer programs to review prospective applications since 2014. Recently, the company attempted to implement a new hiring tool using AI that would rank candidates like search results from a search engine, i.e.., the best 5 candidates from a batch of 100.

It was later identified that one company's algorithm was not ranking their candidates in gender neutral way. The recruitment process using AIs were systematically ruling out applicants who attended all-women's colleges, or even resumes that contained the word "women's". The system was essentially teaching itself that male candidates were preferable to their female counterparts.

The company later disbanded the project.

However, this has not stopped recruiters from looking at the recommendations generated from the system in conjunction with conventional evaluations of potential candidates.

The issue of fairness and bias in machine learning is becoming an increasingly important question in society. AI systems are essentially perpetuating historical patterns of bias due for a variety of reasons; incomplete or skewed training datasets where certain demographics are missing from datasets, and bias induced labels used for training AI systems.

- Companies in the private sector can overcome bias in AI by ensuring diversity in the training samples, bringing more women into AI development, and encouraging machine learning teams to measure accuracy levels separately for different demographic categories.

- Recruiters in the private sector should ensure that their screening process for applicants is not 100% contingent on the use of algorithms and should ask themselves if there are mechanisms in place to report biased decisions. Here is a checklist developed by Delft University of Technology: https://repository.tudelft.nl/islandora/object/uuid%3A1ce06e89-72a7-47fe-bdbd-93775732a30c

- Developers in the technical community can improve their AI by using more diverse training data sets, better quality training data, ensure that machine learning teams measure accuracy levels separately for different demographic categories and identity which one is being treated unfairly, use modern machine learning debiasing techniques.

Awareness & literacy, human oversight & determination, transparency.

- “Amazon reportedly scraps internal recruiting tool that was biased against women”, The Verge, https://www.theverge.com/2018/10/10/17958784/ai-recruiting-tool-bias-amazon-report

- “Amazon scraps secret AI recruiting tool that showed bias against women”, Reuters, https://www.reuters.com/article/us-amazon-com-jobs-automation-insight/amazon-scraps-secret-ai-recruiting-tool-that-showed-bias-against-women-idUSKCN1MK08G

- “Biased bots: Artificial-intelligence systems echo human prejudices”, Princeton University, https://www.princeton.edu/news/2017/04/18/biased-bots-artificial-intelligence-systems-echo-human-prejudices