Algorithmic decision-making and EU gender equality law

Miriam Kullmann
work-related technologies
Amazon scraps secret AI recruiting tool that showed bias against women

SAN FRANCISCO (Reuters) - Amazon.com Inc’s (AMZN.O) machine-learning specialists uncovered a big problem: their new recruiting engine did not like women.

The team had been building computer programs since 2014 to review job applicants’ resumes with the aim of mechanizing the search for top talent, five people familiar with the effort told Reuters.

Automation has been key to Amazon’s e-commerce dominance, be it inside warehouses or driving pricing decisions. The company’s experimental hiring tool used artificial intelligence to give job candidates scores ranging from one to five stars - much like shoppers rate products on Amazon, some of the people said.

“Everyone wanted this holy grail,” one of the people said. “They literally wanted it to be an engine where I’m going to give you 100 resumes, it will spit out the top five, and we’ll hire those.”

But by 2015, the company realized its new system was not rating candidates for software developer jobs and other technical posts in a gender-neutral way.
Artificial Intelligence Poses New Threat to Equal Employment Opportunity

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I am an attorney, author and consultant on employment discrimination.

Just when we thought it was safe to go back in the water, a new threat has emerged to equal employment opportunity as employers base hiring decisions on artificial intelligence powered video and game-based “pre-employment” assessments of job candidates.

The Electronic Privacy Information Center, a public interest research center based in Washington, D.C., recently asked the Federal Trade Commission to investigate HireVue, a recruiting company based in Utah that purports to evaluate a job applicant’s job qualifications through online “video interview” and/or “game-based challenge.”

According to its website, HireVue has more than 700 customers worldwide including over one-third of the Fortune 100 and such leading brands such as Unilever, Hilton, JP Morgan Chase, Delta Air Lines, Vodafone, Carnival Cruise Line, and Goldman Sachs. The company states it has hosted more than ten million on-demand interviews and one million assessments.
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How Uber Service Works

1. Request
2. Matching
3. Ride
4. Payment
5. Rating
unarticulated but operative gendered assumptions and viewpoints in algorithmic decision-making and the role of EU gender equality law
[...] a formally specified sequence of logical operations that provides step-by-step instructions for computers to act on data and thus automate decisions. <<

three types of algorithms

- supervised learning
- unsupervised learning
- machine learning
three advantages
consistent
large amounts recognising patterns
chapter and faster
two main sources of discrimination

(training) data

algorithm
two challenges for EU gender equality law
problems with burden of proof
problems with burden of proof

sufficient facts
problems with burden of proof
problems with burden of proof

sufficient facts  business secret  third parties
problems with burden of proof

sufficient facts

business secret

third parties

Danfoss: lack of transparency
problems with burden of proof

sufficient facts
Danfoss: lack of transparency

business secret
Meister: presumption discrimination

third parties
problems with burden of proof

sufficient facts
Danfoss: lack of transparency

business secret
Meister: presumption discrimination

third parties
Kelly: denied information
data protection regulations

applicability GDPR: disregarding Art 5 or no exception under Art 9
data protection regulations

applicability GDPR: disregarding Art 5 or no exception under Art 9

<<explicit consent>> (Art 4)
applicability GDPR: disregarding Art 5 or no exception under Art 9

<<explicit consent>> (Art 4)

automated decision-making (Art 22)
applicability GDPR: disregarding Art 5 or no exception under Art 9

<<explicit consent>> (Art 4)

automated decision-making (Art 22)

third party information covered as well
can algorithmic decision-making be designed to contribute to gender equality?

empirical research

<< transparency >>

audits

not only a legal issue
defining non-discrimination as aim
THANK YOU!

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Sources

#3 https://www.quora.com/How-can-I-automatize-the-resume-parsing-process

#4 www.reuters.com/article/us-amazon-com-jobs-automation-insight/amazon-scraps-secret-ai-recruiting-tool-that-showed-bias-against-women-idUSKCN1MK08G


#6 https://allhours.com/working-regulations-netherlands/