Heritable Flaws: A Research Essay on the Bias in Artificial Intelligence

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**Abstract**

The abstract will be about 150 words

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**Case summary**

Four years ago in 2018, Reuters news agency published an article on the Amazon AI hiring tool that had been in use a few years prior. The Amazon hiring AI had been developed to review CV’s of job applicants in an attempt to automate and mechanise the hiring process by searching for the ‘best’ applicants. The aim of the AI was to produce scores for candidate employees rating from one to five, with the best scoring employees ultimately being hired. The data being used for training Amazon’s hiring AI was CV’s of successful job applicants at Amazon for the 10 years prior. This is largely where issues arise. Amazon realised the AI was failing at rating candidates in a gender-neutral way for technical positions, and was rating men higher than women. The reasons as to why the AI was rating men higher for these technical positions than women can realistically be due to a number of reasons, but the most obvious flaw was in the data used to train the AI, meaning patterns the AI is taught to look for in good candidates. In this case, the data being used came from previous Amazon technical employees, mostly men as a result being a male dominated industry. By using this dataset to train the hiring AI, the AI was taught that male candidates were preferable for technical positions, because this is who had been hired predominantly by Amazon in the first place. The AI did this by rating certain words and word patterns differently when assessing the CVs, for example by giving a lower rating to CVs that included the word “women”. The Amazon hiring AI was ultimately abandoned as a result of this bias in its systems, despite efforts to make these terms neutral to the AI. Despite this, a multitude of other companies are using and researching AI to make hiring decisions.

[**https://www.reuters.com/article/us-amazon-com-jobs-automation-insight-idUSKCN1MK08G**](https://www.reuters.com/article/us-amazon-com-jobs-automation-insight-idUSKCN1MK08G)

[**https://becominghuman.ai/amazons-sexist-ai-recruiting-tool-how-did-it-go-so-wrong-e3d14816d98e**](https://becominghuman.ai/amazons-sexist-ai-recruiting-tool-how-did-it-go-so-wrong-e3d14816d98e)

[**https://resources.workable.com/stories-and-insights/ai-in-recruitment-amazon**](https://resources.workable.com/stories-and-insights/ai-in-recruitment-amazon)

[**https://egn.com/dk/wp-content/uploads/sites/3/2020/06/The-legal-and-ethical-implications-of-using-AI-in-Hiring.pdf**](https://egn.com/dk/wp-content/uploads/sites/3/2020/06/The-legal-and-ethical-implications-of-using-AI-in-Hiring.pdf)

[**https://link.springer.com/article/10.1007/s10551-022-05166-2**](https://link.springer.com/article/10.1007/s10551-022-05166-2)

[**https://link.springer.com/chapter/10.1007/978-3-030-84729-6\_19**](https://link.springer.com/chapter/10.1007/978-3-030-84729-6_19)

[**https://dl.acm.org/doi/abs/10.1145/3278721.3278751**](https://dl.acm.org/doi/abs/10.1145/3278721.3278751)

**Introduction**

Artificial intelligence

**Discussion on case study**

**Known biases and unknown biases**

**Anglo centric**

**Is it even possible to know the degree to which the data set could be biased.**

**Conclusion**

Drawing on the literature and case description, a good essay should:

* ▪  clearly identify the key issue you want to focus on

*(be sure to focus on just ONE main issue, even if there are a few in the case)*

* ▪  explain why the issue is important – this should be clearly evidenced by your selected case,
* ▪  explain key concepts, if any
* ▪  examine relevant BI/analytics literature, and
* present insights (or recommendations) for practice and/or researchers.