Amazon's Recruitment AI

Background
- Role of AI in recruitment.
- How Amazon's AI worked.
- Identify where and how the bias manifested -for instance training data, algorithm design etc

Ethical Analysis

- AI ethics – fairness and bias
  - -**Transparency:** why transparency is crucial in AI hiring systems ?
  - - **Accountability:** Who is accountable if the AI makes biased decisions?
    And the importance of clear lines of responsibility for ensuring ethical use.
  - - **Human Oversight:** need for the necessity of human review in AI decisions to reduce bias and ensure alignment with company values and Legal requirements.
- How bias occurred in Amazon's system
- Consequences of such bias in the context of recruitment
  - - **Exclusion of Qualified Candidates :** Deserving women might be unfairly screened out.
  - - **Perpetuating Discrimination:** How bias in AI can reinforce existing societal inequalities.
  - - **Loss of Diversity:** Examine how biased hiring decreases diversity, potentially impacting creativity and innovation.

Data science perspective
- Basics of AI algorithm used in recruitment
- How bias can be introduced in the data or algorithm

Proposing Improvements

- Strategies for debiasing data - Suggest methods to remove bias from data sets.
- Algorithmic adjustments for fairness (can build sample recruitment system addressing bias reducing techniques … can use python libraries)
- Ongoing monitoring and evaluation methods for bias.

Research articles

https://www.nature.com/articles/s41599-023-02079-x

https://www.theguardian.com/technology/2018/oct/10/amazon-hiring-ai-gender-bias-recruiting-engine

https://www.academia.edu/42965903/An_overview_of_ethical_issues_in_using_AI_systems_in_hiring_with_a_case_study_of_Amazons_AI_based_hiring_tool

https://www.researchgate.net/publication/373896468_Gender_Bias_in_Hiring_An_Analysis_of_the_Impact_of_Amazon%27s_Recruiting_Algorithm

https://link.springer.com/article/10.1007/s43681-022-00166-4