Bias II

Fundamentals of Artificial Intelligence Programme

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Preexisting bias

Preexisting bias has its roots in social institutions, practices, and attitudes, and usually exists prior to the creation of the system

- Individuals
- Society or culture

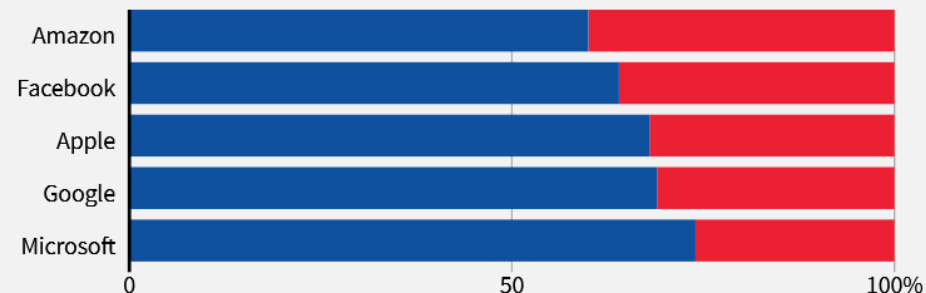# Example: credit card company

Technical bias

Technical bias arises from technical constraints or considerations about the system itself

- Limitations of computer tools
- Use of algorithms developed for a different context
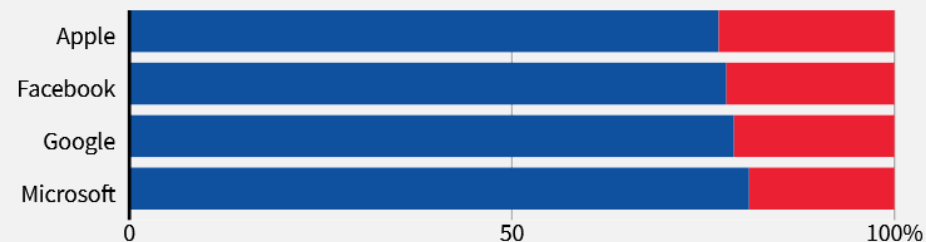- Unwarranted formalization of human concepts

Example: Amazon recruiting tool

GLOBAL HEADCOUNT

■ Male ■ Female

EMPLOYEES IN TECHNICAL ROLES

Note: Amazon does not disclose the gender breakdown of its technical workforce.
By Han Huang | REUTERS GRAPHICS

Emergent bias

Emergent bias is the bias that arises in a context of use, and as a result of

- New societal knowledge or changing cultural values
- Mismatch between the users assumed in the system design and the actual population using the system

Emergent bias

- The data you collect is unrepresentative of reality

- It reflects existing prejudices

Example: COMPAS

Conclusion

Thank you for your attention!