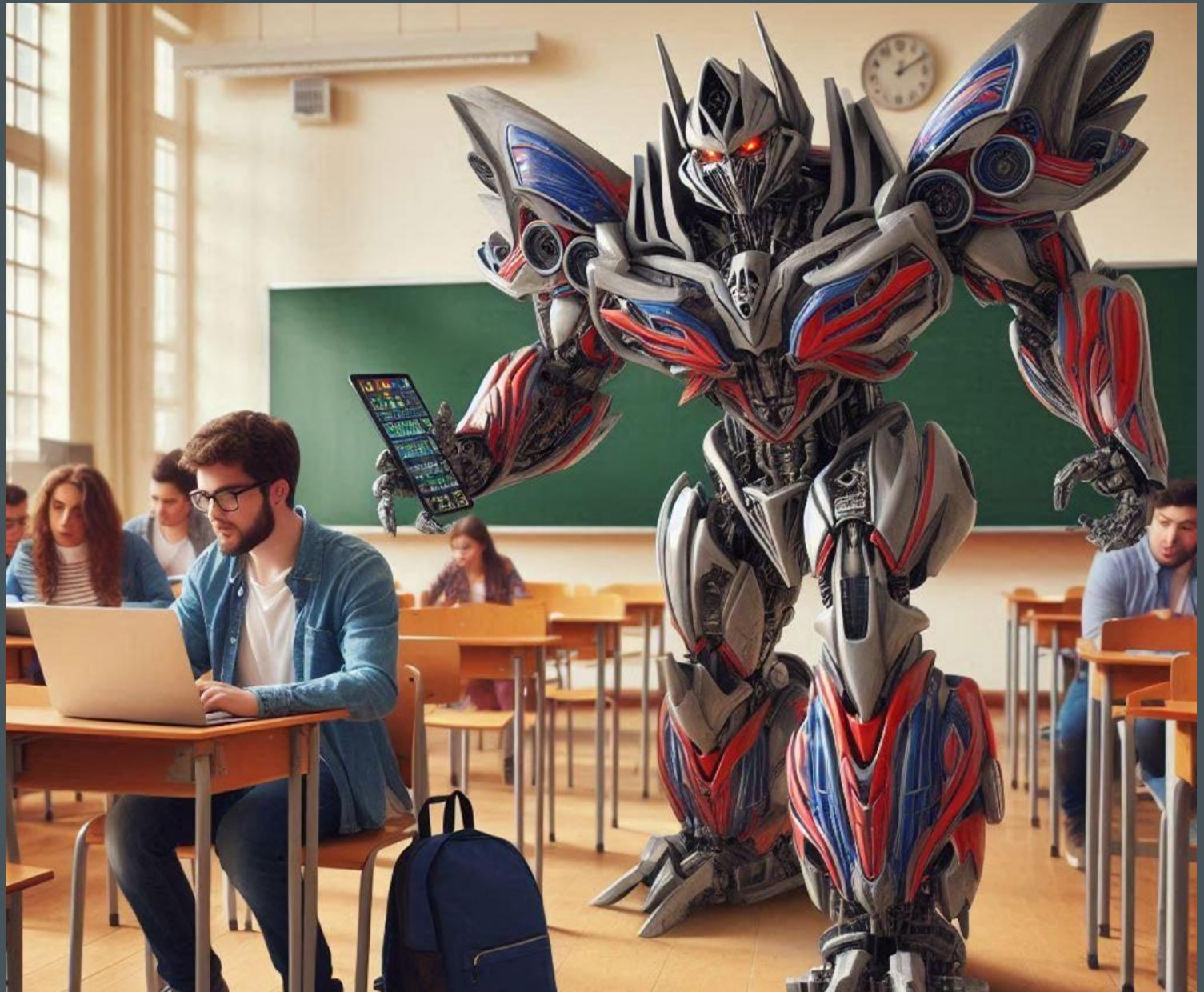


ETHICS AND DATA PRIVACY ISSUES FOR DATA SCIENCE

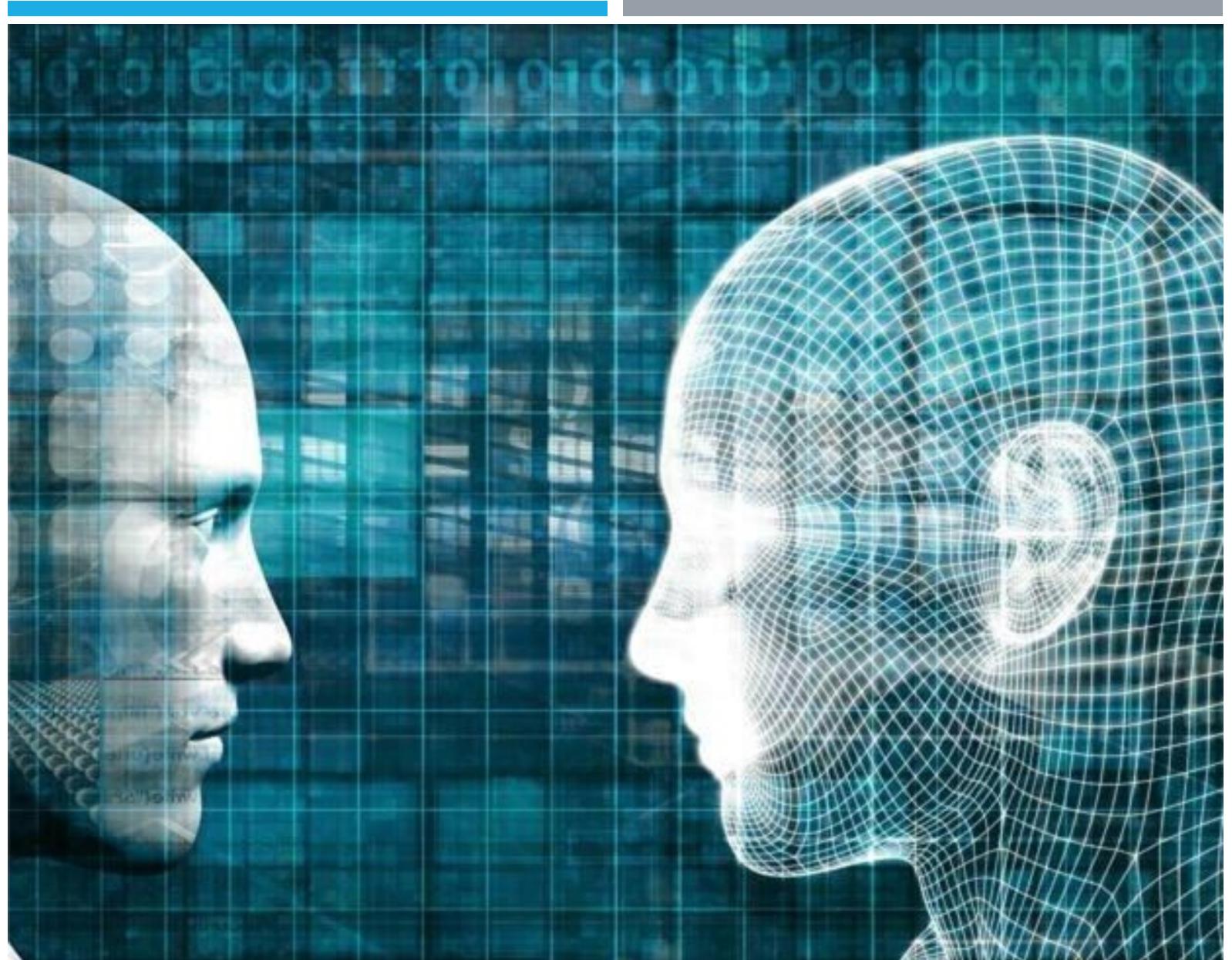
DALL-E3 Prompt: Decepticon tries to steal data from university students



AGENDA

Ethical Issues in AI

- Bias
- Data Privacy
- Job Displacement
- Liability
- Disinformation
- Transparency
- The Singularity--AGI
- Impact of AI Regulations



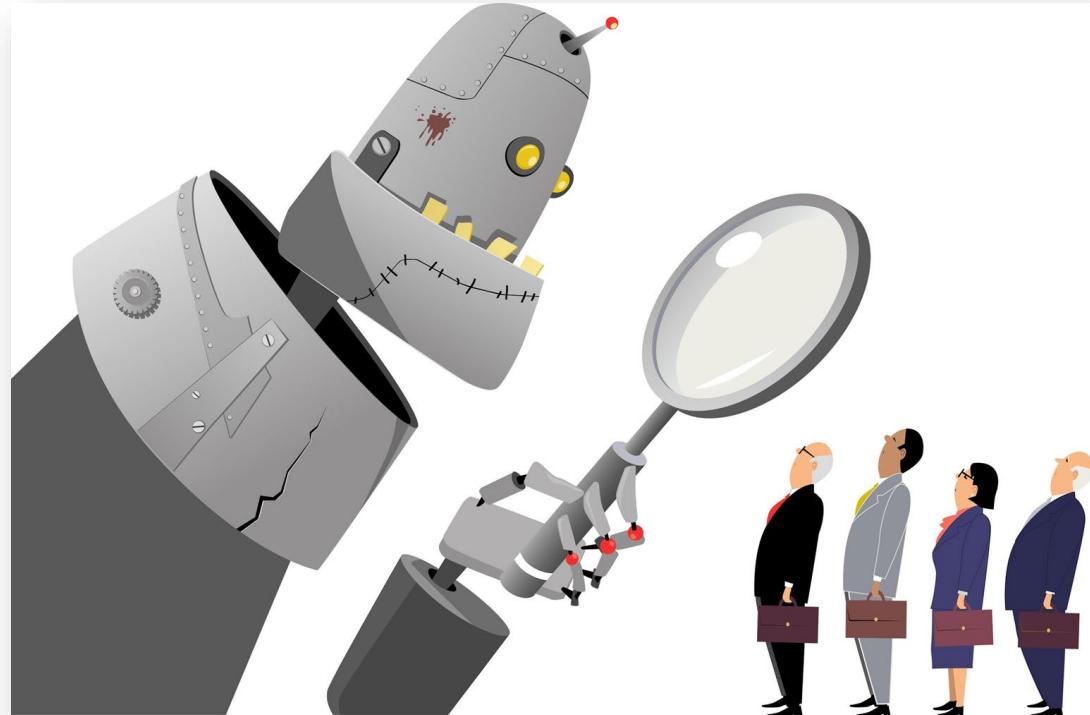
FORM BREAKOUT GROUPS AND PICK

- Bias
- Privacy
- Job Displacement
- Liability
- Disinformation
- Transparency
- The Singularity--AGI
- Impact of AI
Regulations

Is AI fair? Who stands most to lose/win? What can we do about it?

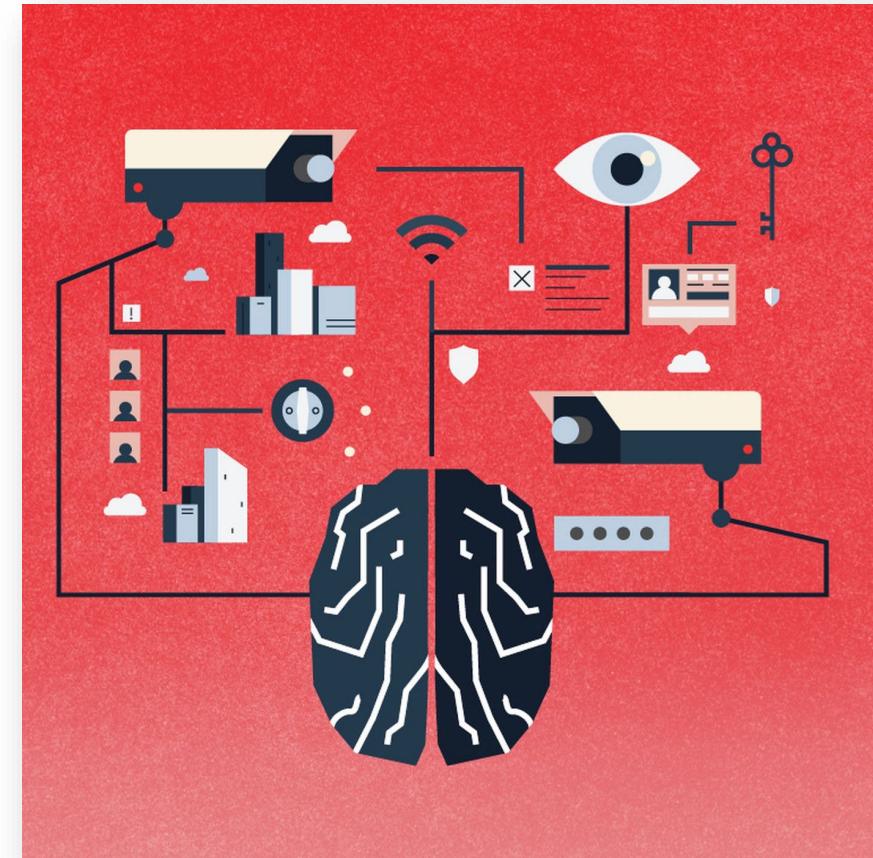
BIAS

- Is AI fair?
- If not, who stands the most to lose?
- How do we fix this?



PRIVACY AND SURVEILLANCE

- What expectations for right to privacy should we have?
- What data should be treated as private vs public?
- What rights do we have to data collected about us?





SMALL SAMPLE OF RECENT DATA PRIVACY FINES

- **Meta (Facebook)**: In 2019, the FTC imposed a record-breaking **\$5 billion fine** on Facebook for privacy violations related to the Cambridge Analytica scandal. The company had deceived users about their ability to control the sharing of personal data with third parties. This penalty was accompanied by new restrictions on Facebook's data handling practices to ensure greater accountability in the future.
- **Amazon**: The Luxembourg National Commission for Data Protection fined Amazon €746 million (**\$888 million**) in 2021. The penalty was for improper targeting of ads and mishandling customer data without obtaining proper consent, violating the European Union's GDPR.
- **Meta (Instagram)**: In a separate case, Meta faced a **€405 million fine** by the Irish Data Protection Commission in 2022 over Instagram's mishandling of teenagers' data. The regulator found that the platform had made children's personal information publicly accessible without adequate protective measures.
- **Capital One**: In 2020, Capital One paid an **\$80 million fine** following a data breach in 2019 that exposed personal data of over 100 million individuals. The U.S. Office of the Comptroller of the Currency penalized the company for lacking effective risk management and security practices.
- **Google**: The FTC fined Google **\$170 million** in 2019 for violating the Children's Online Privacy Protection Act (COPPA). The tech giant was found to have illegally collected personal data from children on YouTube without parental consent.

JOB DISPLACEMENT

- Is AI getting rid of jobs?
- Who benefits from AI?



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LIABILITY/ACCOUNTABILITY

- Who is responsible for AI when makes mistakes?
- Who is responsible for unintended consequences of AI?
- How do we fix this?



DISINFORMATION

- If an AI system generates deep fakes, who is liable?
- Should we regulate systems that can produce harmful disinformation?
- How?



TRANSPARENCY

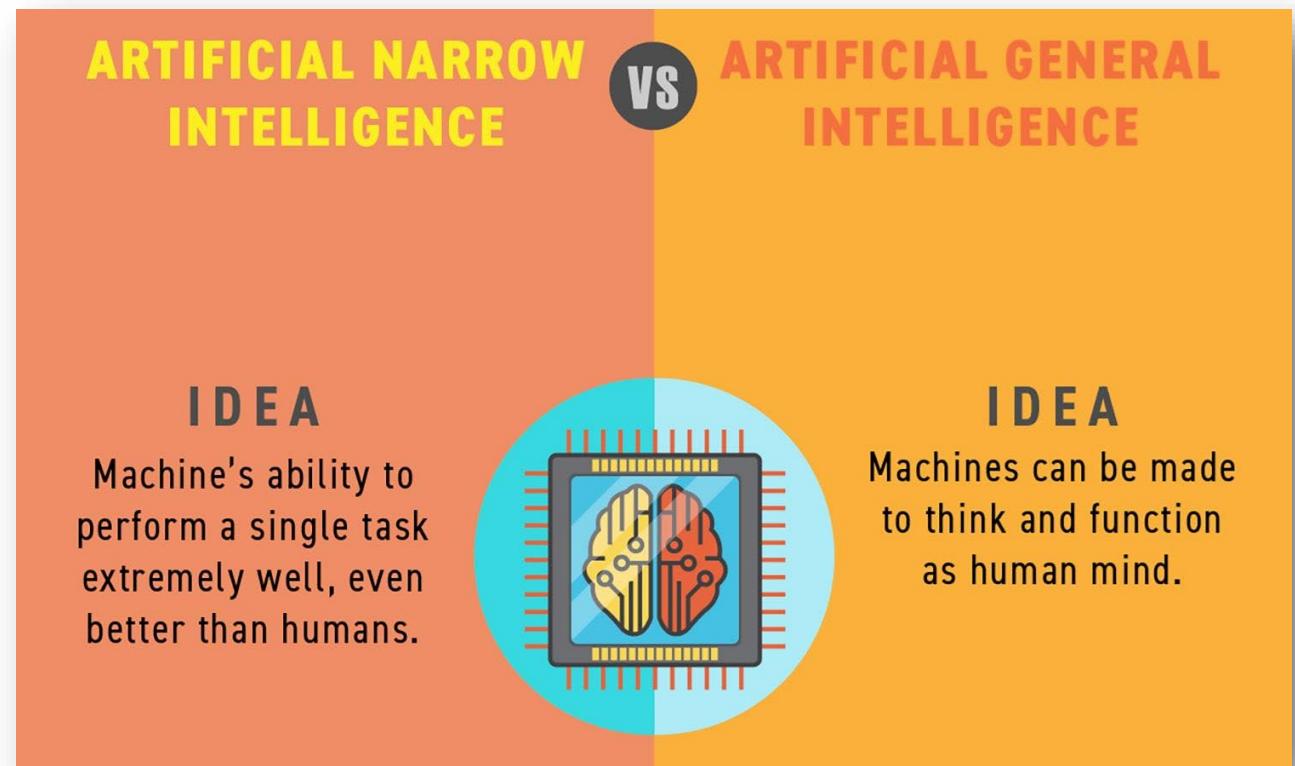
- Should we require high-impact systems to be transparent or explainable?



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DOMAIN-SPECIFIC AI VS. ARTIFICIAL GENERAL INTELLIGENCE

- Is general-purpose AI too dangerous?
- If so, how can we stop / slow its development?



SINGULARITY / EXISTENTIAL RISKS

- Is superintelligence a realistic possibility?
- If so, how can we ensure its values are aligned with ours?

