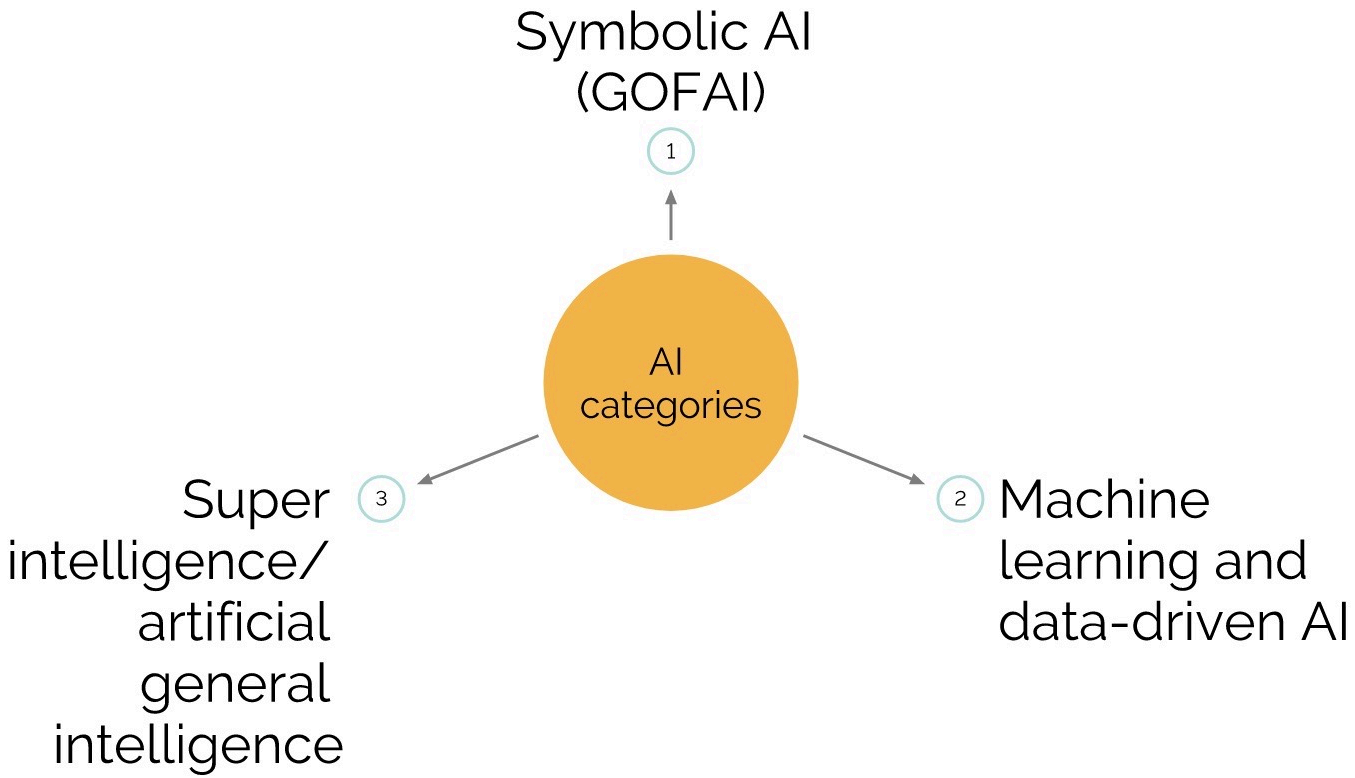
A primer on artificial intelligence for CSOs

European Center for
Not-for-Profit Law

AI categories



Symbolic AI

- Encoding knowledge into sets of rules that can be executed by the machine.

  Example: If X = Y and Y= Z than X = Z

- Improvements in performance are achieved by humans adjusting/adding to the knowledge which is coded directly into the algorithm.

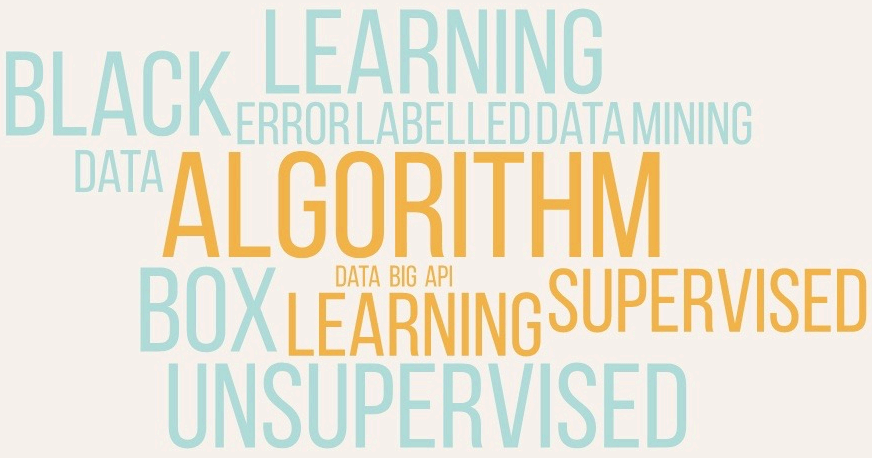
Artificial general intelligence (AGI)

- Does not yet (ever?) exist!
- Algorithms that can exhibit “human-like” (or super human!) intelligence in a wide range of contexts and problem spaces.
- Singularity: the moment where AI becomes sufficiently intelligent and autonomous to generate even more intelligent systems, breaking free from human control.

Machine learning/ data-driven AI

Input ->
Algorithm ->
Output

- Range of techniques that automate the learning process (“training”) of algorithms through data.
- ML algorithms usually find their own ways of indentifying patterns, and apply what they learn to make statements about data (“predictions” or decisions).



Common definitions

- **Algorithm**

  A set of rules defining how to perform a task or solve a problem. In the context of AI, this usually refers to computer code defining how to process data.

- **Application programme interface (API)**

  APIs are the access points that apps and third parties can use to engage with larger platforms and systems, like mobile phones or social media websites.

- **Big data**

  Broader than AI, big data refers to sets of data that are so large and complex that they cannot be effectively stored or processed with traditional methods.

- **Data mining**

  Automated process for extracting data and identifying patterns and anomalies.

- **Labelled data**

  Data that is accompanied with inforation about the data.

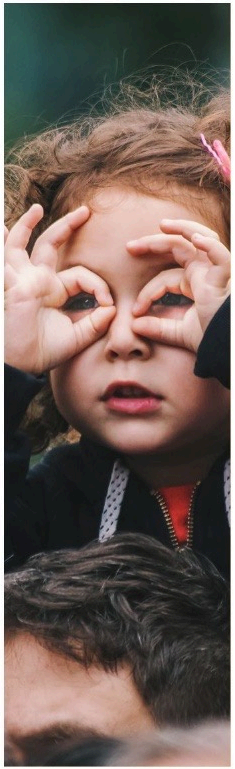
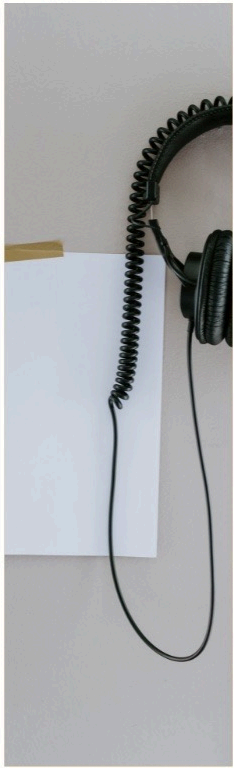


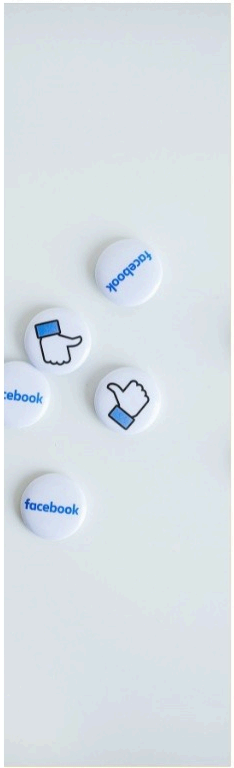
Image recognition/ computer vision



Voice/ audio recognition

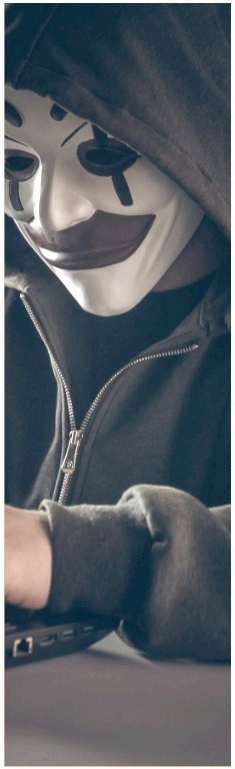
Predictive text

Translation



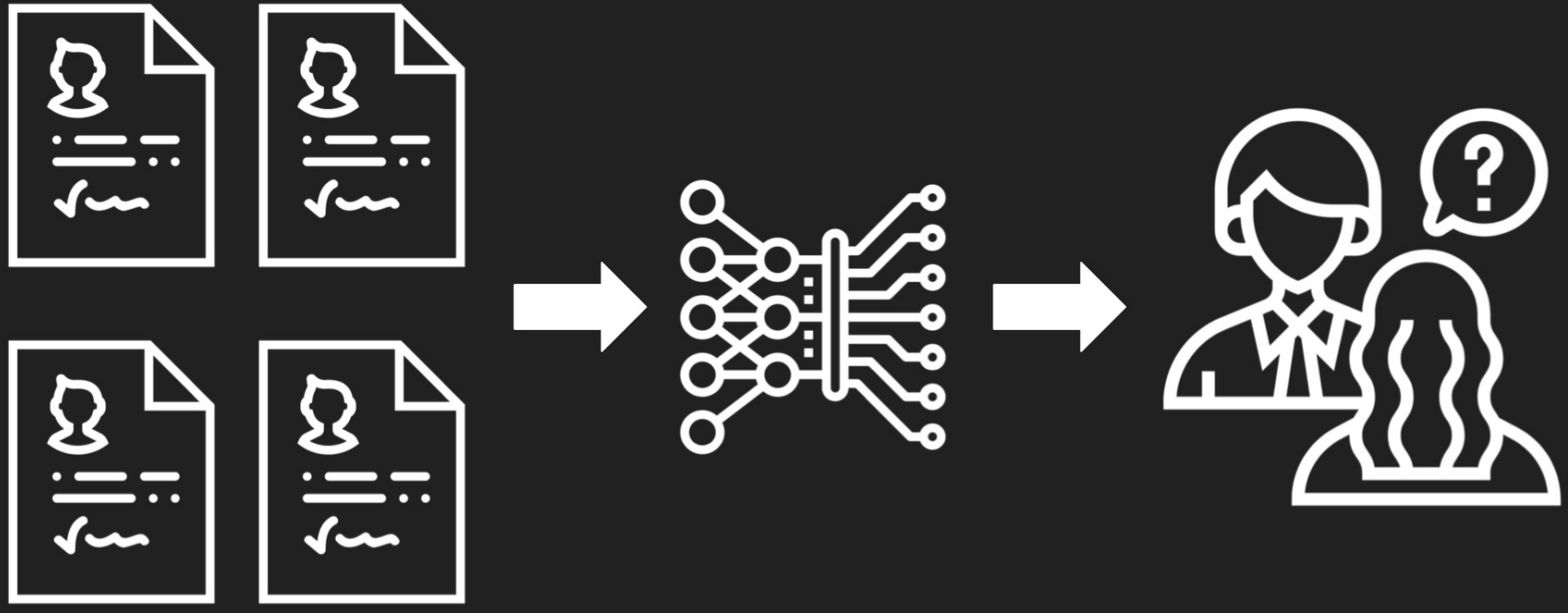
Targeted advertising

Content moderation



Fraud detection

Example: Reviewing Resumes



Transparency
Stakeholder Engagement
Accountability

Marlena Wisniak, ECNL

Image credit: Fonzy Nils, https://thegreats.co/artworks/future

Corporate Power

- AI design, development, deployment
- Privatization of social services
- Global North
- Software
- Hardware & infrastructure
- Funding/ VCs
- Big Data

Image credit: Lorenzo Miola, https://thegreats.co/artworks/yearning-to-move-on

Lack of Transparency

- X Design & development: input - algorithm - output
- X Deployment
- X Governance mechanisms, due diligence, risk management strategies

Image credit: Atanas Giew, https://thegreats.co/artworks/you-are-in-control

Exclusion of Affected Communities

- Insufficient technical skills
- Under-resourced
- Techno-solutionism
- Corporate capture and “human rights washing”
- Multi-stakeholder participation in policymaking

Image credit: Ivonne Navarro, https://thegreats.co/artworks/solidarity-banner

Thank you!

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