Rough intro to Al

James Brusey

11 January 2024

James	Brusey
-------	--------

Rough intro to Al

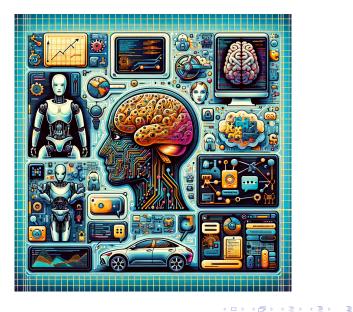
2

(a)

Some talking points

- Understanding of the main AI tools currently available and what might change over the next few months
- Current uses in research
- Opportunities and risks
- Ethical considerations
- CU capabilities and how these are evolving

What AI thinks of AI



Overview of AI

- Machine learning
 - Supervised
 - ★ Take a picture and recognise a digit, dog, tank,
 - ★ Generative
 - Unsupervised
 - Reinforcement Learning

▲ 西部

3

Importance of Openness for LLMs

- Technology for OpenAI GPT-4 is proprietary (as are Bard / Claude)
- Open source systems (e.g., Mistral) getting better though
- Need to avoid lock-in
- Need to know what is inside

Similarities between LLMs and the Human Brain

- Physical and Functional Differences
- Large-Scale Complexity
- Pattern Recognition and Learning
- Limitations in Comparison

Current Limitations and Future Possibilities of LLMs

- Lack of Memory and Contextual Understanding
- Output Restrictions
- No Embodiment or Sensory Perception
- Absence of Emotional Intelligence
- Potential for Future Advancements