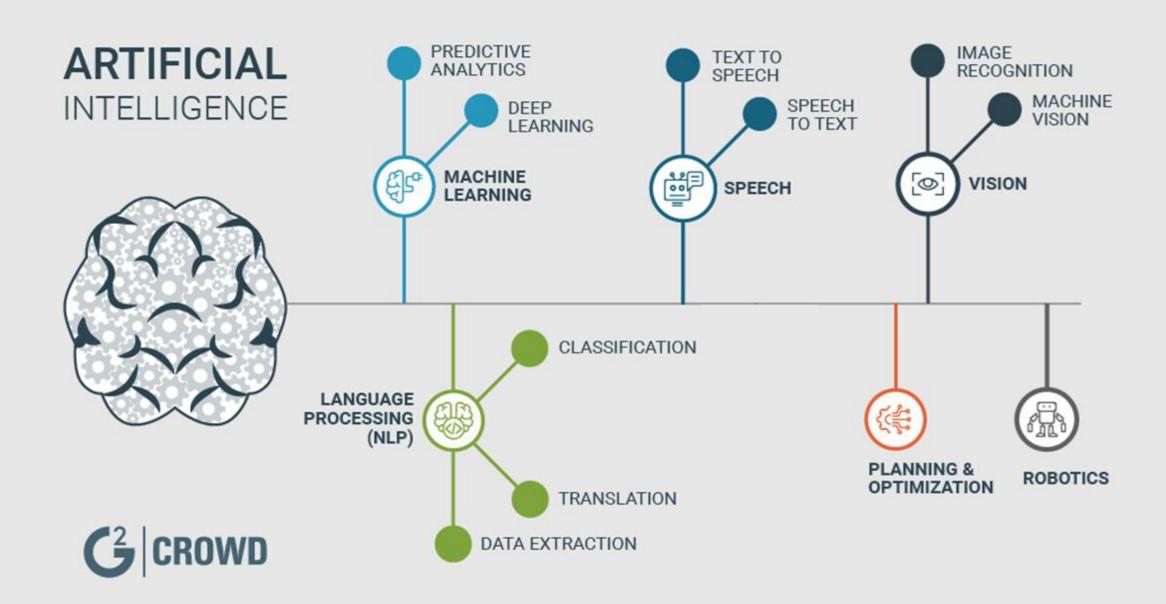


Gen-Al in Large-Scale Enterprise Robotics & Automation



Source: Michael Mills of Neota Logic

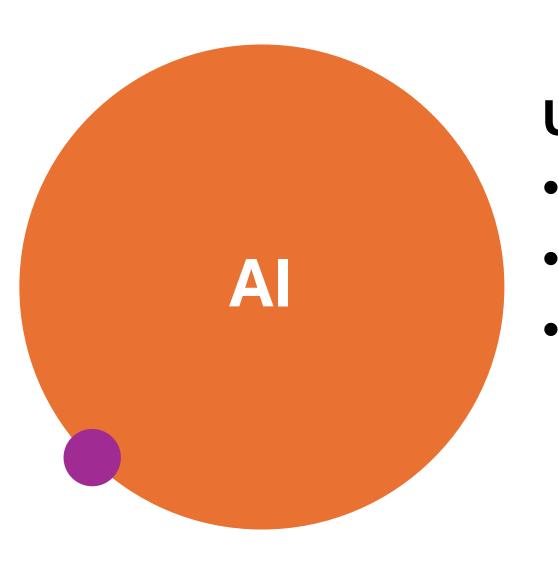
Gen-Al and Robot

• What would a similar breakthrough look like for embodied systems like robots? Is it simply giving robots a ChatGPT-style interface, or could there be a deeper transformation in the offing?









Use Case

- Customer Service
- Finance
- Human Resource

Al Current State, Questions

Is Al able to:

- Perform tasks without supervision and monitoring?
- Think for cases not seen before and reacts accordingly?
- Generalize across various domains and tasks?
- Perform self-maintenance and upgrade?
- Provide the human touch?

Considerations for Developing Al Models



Transparency



Fairness and Bias



Audit



Confidentiality



Ethic

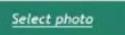
New Zealand passport robot tells applicant of Asian descent to open eyes

2 MIN READ



Bias in Al

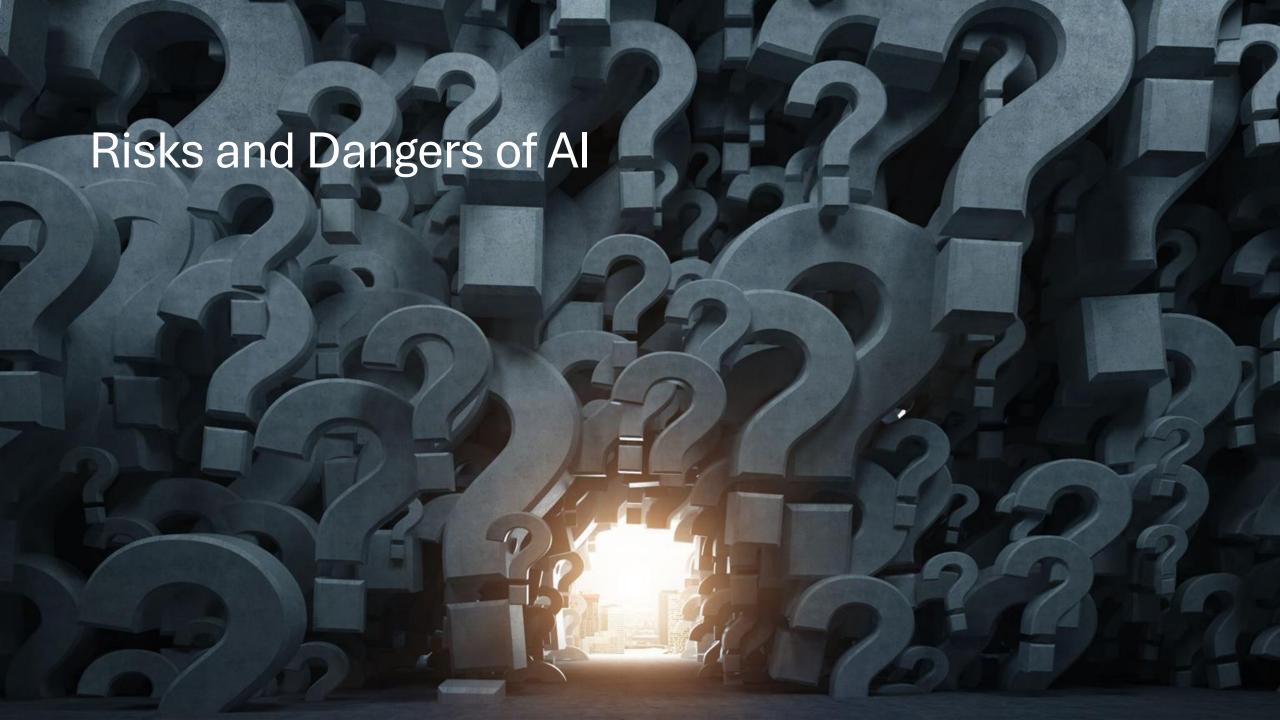
- Happens when AI model or algorithm discriminate against certain group
- Produces undesirable outcomes and does not provide a fair assessment and judgement













Dangers of Al

- Lack of AI Transparency and Explainability
- Job Losses Due to Al Automation
- Social Manipulation Through AI Algorithms
- Social Surveillance With AI Technology
 - China's use of facial recognition technology in offices, schools and other venues. Besides tracking a person's movementsLack of Data Privacy Using Al Tools
- Lack of Data Privacy Using AI Tools
- Biases Due to Al
 - **Example:** A.I. researchers are primarily people who are male, who come from certain racial demographics, who grew up in high socioeconomic areas, primarily people without disabilities
- Socioeconomic Inequality as a Result of Al



Dangers of Al

- Weakening Ethics and Goodwill Because of Al
- Autonomous Weapons Powered By Al
- Financial Crises Brought About By Al Algorithms
 - algorithmic trading, they don't take into account contexts,
- Loss of Human Influence
 - in some parts of society. Using AI in *healthcare* could result in reduced human empathy and reasoning
- Uncontrollable Self-Aware Al
- Increased Criminal Activity
- Broader Economic and Political Instability
 - Al could run the risk of drawing so much attention and financial resources that governments fail to develop other technologies and industries

Ghibli Al Creator Case Study



Ghibli-Style Al Images Raise Ethical Concerns





How to Mitigate the Risks of Al



Develop Legal Regulations

- U.S. and European Union are creating more clear-cut measures
- Develop new rules and guidelines for Al safety and security

2

Establish Organizational Al Standards and Discussions

- On a company level, there are many steps businesses can take when integrating **AI** into their operations.
- Organizations can develop processes for monitoring algorithms, compiling highquality data and explaining the findings of AI algorithms

3

Guide Tech With Humanities Perspectives

• The creators of Al must seek the insights, experiences and concerns of people across ethnicities, genders, cultures and socio-economic groups, as well as those from other fields, such as economics, law, medicine, philosophy, history, sociology, communications, human-computer-interaction, psychology, and Science and Technology Studies