

Professor Gianni Di Caro: Robotics and AI

How would you define Artificial Intelligence (AI)?

Artificial intelligence is technology that allows machines to carry out some of the tasks that humans do, such as problem-solving, decision-making, etc.

AI has existed for nearly 70 years. Why is it experiencing an impressive growth right now?

AI is experiencing an impressive growth right now because of the increase in LLMs and the availability of large data (for the models to be trained on).

Can you identify three domains or classes of problems where current AI models still face significant challenges?

1. Data risks: data is at the risk of being altered, biased, etc.
2. Operational risks: models can be manipulated
3. Ethical risks: models can produce biased outcome

Can you name at least three application sectors where robots are widely used, and explain why they are employed in those sectors?

1. Medicine: used in surgery (e.g. image-guided surgery) and/or simple tasks
2. Transport: used for self-driving cars with little to no human inference
3. Warehouse: used for tasks within a warehouse (e.g. storing items)

Do you believe that the convergence of Artificial General Intelligence (AGI) and fully autonomous robotics is imminent and could potentially have a major impact on the world?

Yes, I believe that the convergence of AGI and robotics, which will transform societies, solve difficult problems, and much more, is imminent as the accessibility of model-training resources is increasing.

Sources:

- [What Is Artificial Intelligence \(AI\)? | IBM](#)
- [Top 10 Industries Utilizing Robots and Robotics](#)
- [Why AGI is Closer Than You Think. Many, if not most, AI experts believe... | by SingularityNET](#)