

COS30019 - Introduction to Artificial Intelligence
Tutorial Problems Week 1

Task 1:

Explain the relations between different paradigms of AI. Would the solutions in one paradigm be applicable to solve problems in another?

Task 2:

Research a number of applications with potential use of AI. E.g., driverless car, SIRI, expert systems, web search engine, decision support systems, etc.

A. What AI paradigm would be most suitable for such applications?

B. Describe your own ideas on how the problem can/should be solved. What knowledge/skills do you lack if you are required to build such applications?

Task 3:

Various subfields of AI have held contests by defining a standard task and inviting researchers to do their best. Examples include the DARPA Grand Challenge for robotic cars, the International Planning Competition, the Robocup robotic soccer league, the TREC information retrieval event, and contests in machine translation, speech recognition, etc. Investigate at least three of these contests and describe the progress made over the years. To what degree have the contests advanced the state of the art in AI? To what degree do they hurt the field by drawing energy away from new ideas?