

Introduction to Artificial Intelligence

Exercise 1

Summer Semester 2020

1 General Questions

1. Can you list some current applications of AI? Have you used any of them?
2. Which disciplines (other than Computer Science) are related to AI and how?
3. What are the pros and cons of AI?

2 Applications of Artificial Intelligence

Discuss if the following tasks can be solved by a computer system. Identify the problems of the individual tasks

1. Playing a decent soccer game against a human team.
2. Prove a mathematical theorem.
3. Write a funny story.
4. Give correct advice on legal problems in a specialized field.

3 Turing Test

What is the Turing Test and how does it work? Which abilities can be assessed using the Turing Test?

4 Rational Agents

Draw the basic schematic of a rational agent and its interaction with the environment covering the following aspects: Agent, Environment, Sensors, Actuators, Percepts, Actions.