

Intelligent Agents

Practical 2

PART 1 – Agents

You will need to do some research for these. We'll discuss them in the tutorial session and hopefully get some different facts and points of view.

1. Consider each of the following agents and the environment it is designed for. What are the environment definitions for each?
 - a. Pac Man
 - b. An autonomous taxi.
 - c. An underwater drone that monitors shark activity.
2. Consider each of the following agents and the purpose that it is designed for. What are the PEAS definitions for each?
 - a. Pac Man
 - b. An autonomous taxi.
 - c. An underwater drone that monitors shark activity.
3. **Statement:** The perseverance Mars rover is largely controlled remotely rather than functioning autonomously. Therefore, it is not an intelligent agent. Discuss.
4. What is a drone swarm? What are the advantages and drawbacks of having multiple agents working in a swarm as opposed to having agents working individually?

PART 2 – Case Study

Choose (at least) one of the below intelligent agents. Do some research on it. Define the environment that the agent is designed to interact with and give a PEAS definition of the agent.

1. An automated fruit picking machine.
2. Rio Tinto's Autonomous Haulage System technology.
3. A member of a proposed drone swarm used by police for detection and pursuit of fleeing suspects.
4. A bot in a game like World of Warcraft.
5. A robot that delivers pizza by driving along the sidewalks.

You should do some research on your chosen agent and make some notes. Come to the tutorial to be part of some discussion. This question will contribute towards your assignment (you'll need to submit something much like this although not these actual notes).