

Sort 1

2b How would you define 'artificial intelligence'?

AI is the field of computer science that is associated with the concept of machines “thinking like humans” to perform tasks such as learning, problem-solving, planning, reasoning, and identifying patterns.

2c Give three examples of AI applications. You can choose real-life examples, but also examples from popular culture (e.g. movies, books, video games etc.).

- Self driving cars
- Recommendation systems based on our reactions, interests, choices and behavior as in Google Engine – Netflix – Spotify
- Chat-bot

3a Read the first two sub-chapters of the book Artificial Intelligence: A Modern Approach by Russell and Norvig (2021) (p.19-35).

I ordered the book but didn't arrive yet, so tomorrow I will give it a look in the library

3b Define the following terms: 'Weak AI', and 'Strong AI'.

Weak AI :

Weak artificial intelligence (AI)—also called narrow AI—is a type of [artificial intelligence](#) that is limited to a specific or narrow area. Weak AI simulates human cognition. It has the potential to benefit society by automating time-consuming tasks and by analyzing data in ways that humans sometimes can't.

So in short Weak AI are systems that do not have general Intelligence, they have specific intelligence in a specific Field that is programmed by humans such as driving from Point A to point B with limited capabilities

Examples: Image and speech recognition

Strong Ai :

The term “strong” AI can alternatively be understood as broad or general AI. Artificial general intelligence (AGI) is focused on creating intelligent machines that can successfully perform any intellectual task that a human being can.

this comes down to three aspects: (1) the ability to generalize knowledge from one domain to another and take knowledge from one area and apply it somewhere else; (2) the ability to make plans for the future based on knowledge and experiences; and (3) the ability to adapt to the environment as changes occur. Additionally, there are ancillary aspects that come with these main requirements, such as the ability to reason, solve puzzles, represent knowledge and common sense, and the ability to plan.

3d What is the 'Chinese room experiment'? Describe its procedure.

English speaker locked in a room

He has a large batch of Chinese writing, “the second batch of Chinese script” and “a set of rules” in English,

This rule explains to the man that when he gets a Chinese symbol from outside the door, he has to search in the second batch for the same symbol to find an answer to the question from the outside, and the answer is also a Chinese symbol

Outside the door, there are Chinese speakers who are writing questions in Chinese to the English speaker and putting them through the door

As the letter comes in, the person in the room matches the symbol in the rule book

And send out another Chinese symbol as answer/reply

the responses are “absolutely indistinguishable from those of Chinese speakers.” Just by looking at the answers, nobody could tell that the man behind the door is not a Chinese speaker

3e What is the 'Chinese room experiment' supposed to show? Select the correct statement, and elaborate on your choice:

b) Understanding involves more than the ability to formally reproduce appropriate outputs

3f Connect the Post It notes (Fig 2.) to the relevant quadrant in the philosophy matrix (Fig 3.)

A : Systems that think Rationally = Weak AI – Chinese Room Experiment

B : System that act rationally=– Rational Agents – Swarm Intelligence

C : Systems that think like humans = Strong AI - Psychology – Turning Test

D : System that act like humans = Cognitive Science – Neuroscience

3g After completing the readings and exercises of this section, would you provide the same answer to exercise 1b? Explain your answer

I can't find exercise 1b

Find, and describe one 'milestone' in the history of AI

For me personally as a milestone I would always mention LBM when an AI program that beat the world regning champion at chess , Garry Kasparov

and also another cool example when Ai Bots won the final championship against humans team who got 2 championships in arow of the famous Strategy game DOTA 2 in 2018,

for more info

<https://bdtechtalks.com/2019/04/17/openai-five-neural-networks-dota-2/>