

Human vs Artificial intelligence

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Agenda

1. Historical view on consciousness
2. Modern perspective

Consciousness



René Descartes (Kartezjusz)



*“Discourse on the Method for Conducting One’s Reason Well
and for Seeking the Truth in the Sciences”*

1. *“First is that they could never use words or other signs, or put them together as we do in order to declare our thoughts to others”*



1.

2. *“The second means is that, although they might perform many task very well or perhaps better than any of us, such machines would fail in other tasks by this means one would discover that they were acting, not through knowledge, but only through the disposition of their organs”*

Cartesian dualism

- Descartes believed that mind and body is completely separate from one another,
- it's possible to doubt the body, but not the mind: “Cogito ergo sum”.

Turing test

- envisioned by Alan Turing, first introduced in his paper:
"Computing Machinery and Intelligence",
- can't actually check consciousness of the machine, only the appearance of it.

Current state of technology

- exponential growth of processing power

What can we do with artificial neural networks today

- speech recognition,
- natural language processing,
- recognizing people, animals, objects in images,
- learning games by playing with itself - AlphaGo, AlphaZero.

Where the current AI is lacking

- it's still very specialized,
- usually needs a lot of data to learn,
- processing power,
- needs human supervision in determining goals, inputs.

The future - General AI

- doesn't actually have to work like a human brain,
- able to take action in the physical world,
- able to solve general problems,
- more processing power than all human brains.

Thanks for the attention