



What is AI?

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What is AI?

Formal:

John McCarthy coined the term **Artificial Intelligence (AI)** at the 1956 First AI Conference at Dartmouth.

Machines that simulate human intelligence (learning, reasoning, problem solving).



What is AI?

Funny:

A machine that can clean my house, cook, mow the lawn, do laundry, etc.

... without being told.



What is AI?

Practical / Moving Goalposts:

Whatever computers can't do *yet*.

Once solved, we stop calling it AI.



Turing Test (1950)

Can a hidden computer fool a human into thinking it's talking to another human?



Human Intelligence

Brain Based

Thinking, reasoning, problem-solving, planning, understanding ideas, etc.

Nervous System Based

Reflexes, muscle memory, physical coordination, automatic skills, etc.

AI definitions and success measures are limited to human brain based intelligence.



Neat AI vs Scruffy AI

Neat AI

Brain based, clean logical rules,
easy for computers.

Scruffy AI

Nervous system based, messy logic,
hard for computers.

Moravec's Paradox

Things that are easy for computers are hard for
humans.

Things that are easy for humans are hard for
computers.



Do submarines swim?

Submarines don't swim like humans or animals, but can produce similar or better outcomes.

Do AIs think?

AIs don't think like humans do, but can produce similar or better outcomes.



Do AIs experience consciousness or have feelings, emotions, or subjective experiences?

No evidence they do, but they can be trained to act as if they do, loosely called

Philosophical Zombies (P-Zombies).

(My personal opinion: definitely no. But it's considered an open question, with AI companies teasing it for marketing purposes.)



Artificial General Intelligence (AGI)

AI that matches or exceeds human brain based intelligence across a wide range of intellectual tasks.



Animal Intelligence

Animals have unique capabilities humans lack.

Animal intelligence is absent from AI definitions and success measures.

AI systems exhibiting animal intelligences are useful.



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The End