CS 4100/5100: Foundations of AI
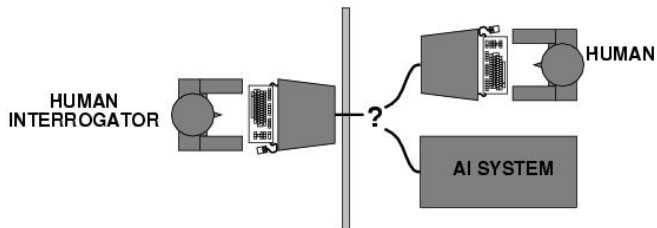## History

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What is AI: the Turing Test

A short (and scattered) history of AI

- 1952, Arthur Samuel: developed a computer program that could play checkers (using an early version of alpha-beta pruning).

Irrational Exuberance

Herbert Simon (1957):

"It is not my aim to surprise or shock you – but the simplest way I can summarize is to say that there are now in the world machines that think, that learn, and that create. Moreover, their ability to do things is going to increase rapidly until – in a visible future – the range of problems they can handle will be coextensive with the range to which the human mind has been applied."
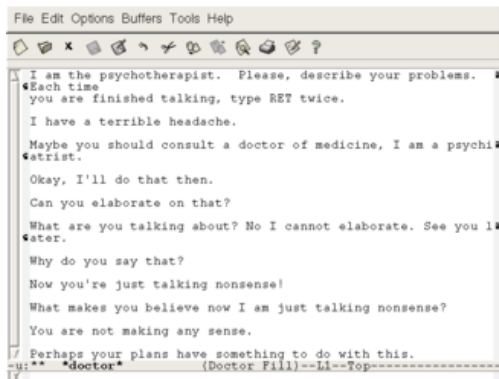
A short (and scattered) history of AI

- 1960, Donald Michie: MENACE (Matchbox Educable Noughts And Crosses Engine) – a program that learned to play an optimal game of tic-tac-toe (an early version of RL).

A short (and scattered) history of AI

- 1962, Frank Rosenblatt: Percptrons. Proof that simple neural network learning algorithms can learn any pattern that can be represented by the network.
 - But, it turns out that many interesting functions cannot be represented this way: xor, for example.

A short (and scattered) history of AI


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File Edit Options Buffers Tools Help

I am the psychotherapist.  Please, describe your problems.
Each time
you are finished talking, type RET twice.

I have a terrible headache.

Maybe you should consult a doctor of medicine, I am a psychi
atrist.

Okay, I'll do that then.

Can you elaborate on that?

What are you talking about? No I cannot elaborate. See you l
ater.

Why do you say that?

Now you're just talking nonsense!

What makes you believe now I am just talking nonsense?

You are not making any sense.

Perhaps your plans have something to do with this.
-u:**  *doctor*       (Doctor Fill)--L1--Top
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▶ 1964–1966, Joseph Weizenbaum: ELIZA, natual language interation based on scripts.

A short (and scattered) history of AI

▶ late 1960s, Nilsson *et. al.*: Shakey
  project at SRI (occasioned the
  development of STRIPS, an early
  planner).

A short (and scattered) history of AI

PICK UP A BIG RED BLOCK.

OK.
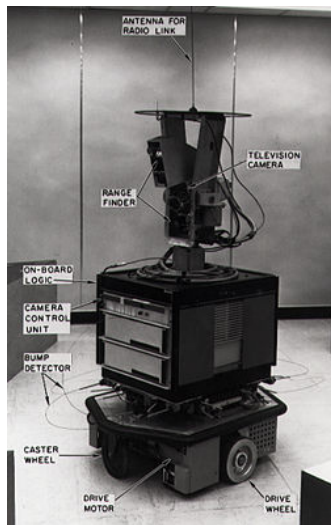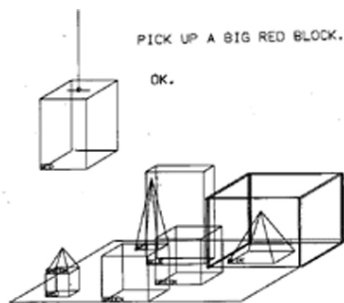
- 1972, Terry Winograd: SHRDLU, natual language understanding in the context of a "blocks world".