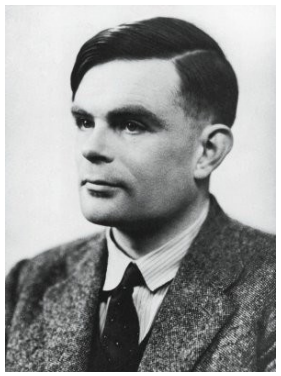
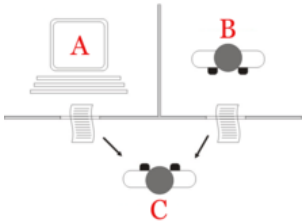
Artificial Intelligence

“strong Artificial intelligence will be the last invention of human race”

Artificial intelligence (AI, also machine intelligence, MI) is intelligence exhibited by machines, rather than humans or other animals (natural intelligence, NI). In computer science, the field of AI research defines itself as the study of "intelligent agents": any device that perceives its environment and takes actions that maximize its chance of success at some goal. Colloquially, the term "artificial intelligence" is applied when a machine mimics "cognitive" functions that humans associate with other human minds, such as "learning" and "problem solving".

The Turing test, developed by Alan Turing in 1950, is a test of a machine's ability to exhibit intelligent behavior equivalent to, or indistinguishable from, that of a human. Turing proposed that a human evaluator would judge natural language conversations between a human and a machine designed to generate human-like responses. The evaluator would be aware that one of the two partners in conversation is a machine, and all participants would be separated from one another. The conversation would be limited to a text-only channel such as a computer keyboard and screen so the result would not depend on the machine's ability to render words as speech. If the evaluator cannot reliably tell the machine from the human, the machine is said to have passed the test. The test does not check the ability to give correct answers to questions, only how closely answers resemble those a human would give.





The "standard interpretation" of the Turing Test, in which player C, the interrogator, is given the task of trying to determine which player – A or B – is a computer and which is a human. The interrogator is limited to using the responses to written questions to make the determination

The history of artificial intelligence

3 huge develop time and 2 AI winters

- The field of AI research was born at a workshop at Dartmouth College in 1956. Attendees Allen Newell (CMU), Herbert Simon (CMU), John McCarthy (MIT), Marvin Minsky (MIT) and Arthur Samuel (IBM) became the founders and leaders of AI research.
- By the middle of the 1960s, research in the U.S. was heavily funded by the Department of Defense and laboratories had been established around the world. They failed to recognize the difficulty of some of the remaining tasks.
- Progress slowed and in 1974. The next few years would later be called an "AI winter", a period when obtaining funding for AI projects was difficult.
- In the early 1980s, AI research was revived by the commercial success of expert systems, a form of AI program that simulated the knowledge and analytical skills of human experts.
- By 1985 the market for AI had reached over a billion dollars.
- However, beginning with the collapse of the Lisp Machine market in 1987, AI once again fell into disrepute, and a second, longer-lasting hiatus began.
- In the late 1990s and early 21st century, AI began to be used for logistics, data mining, medical diagnosis and other areas. The success was due to increasing computational power, greater emphasis on solving specific problems.
- Deep Blue became the first computer chess-playing system to beat a reigning world chess champion, Garry Kasparov on 11 May 1997.By the mid 2010s, machine learning applications were used throughout the world. In a Jeopardy! quiz show exhibition match, IBM's question answering system, Watson, defeated the two greatest Jeopardy champions, Brad Rutter and Ken Jennings, by a significant margin.
- In March 2016, AlphaGo won 4 out of 5 games of Go in a match with Go champion Lee Sedol, becoming the first computer Go-playing system to beat a professional Go player without handicaps.
- In the 2017 Future of Go Summit, AlphaGo won a three-game match with Ke Jie, who at the time continuously held the world No. 1 ranking for two years

Famous companies taking part in AI research area

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