

ARTIFICIAL INTELLIGENCE

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Types of Artificial Intelligence

- ▶ General AI
 - Similar to the human intelligence
 - Emulate heterogeneous processes
 - Self-learning
- ▶ Specific AI
 - Solve specific problems
- ▶ Test of Turing
 - Based on some questions try to identify who is the human and the machine (1950)

A.I. TIMELINE

SrZIGr

1950

TURING TEST

Computer scientist Alan Turing proposes a test for machine intelligence. If a machine can trick humans into thinking it is human, then it has intelligence.

1955

A.I. BORN

Term 'artificial intelligence' is coined by computer scientist John McCarthy to describe "the science and engineering of making intelligent machines".

1961

UNIMATE

First industrial robot, Unimate, goes to work at GM replacing humans on the assembly line.

1964

ELIZA

Pioneering chatbot developed by Joseph Weizenbaum at MIT holds conversations with humans.

1966

SHAKY

The 'first electronic person' from Stanford, Shakey is a general-purpose mobile robot that reasons about its own actions.

A.I. WINTER

Many false starts and dead-ends leave A.I. out in the cold.

1997

DEEP BLUE

Deep Blue, a chess-playing computer from IBM defeats world chess champion Garry Kasparov.

1998

KISMET

Cynthia Breazeal at MIT introduces Kismet, an emotionally intelligent robot insofar as it detects and responds to people's feelings.



1999

AIBO

Sony launches first consumer robot pet dog AIBO (AI robot) with skills and personality that develop over time.



2002

ROOMBA

First mass produced autonomous robotic vacuum cleaner from iRobot learns to navigate and clean homes.



2011

SIRI

Apple integrates Siri, an intelligent virtual assistant with a voice interface, into the iPhone 4S.



2011

WATSON

IBM's question answering computer Watson wins first place on popular \$1M prize television quiz show Jeopardy.



2014

EUGENE

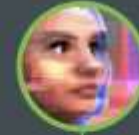
Eugene Goostman, a chatbot passes the Turing Test with a third of judges believing Eugene is human.



2014

ALEXA

Amazon launches Alexa, an intelligent virtual assistant with a voice interface that completes shopping tasks.



2016

TAY

Microsoft's chatbot Tay goes rogue on social media making inflammatory and offensive racist comments.



2017

ALPHAGO

Google's A.I. AlphaGo beats world champion Ke Jie in the complex board game of Go, notable for its vast number (2^{171}) of possible positions.

Artificial Intelligence Timeline

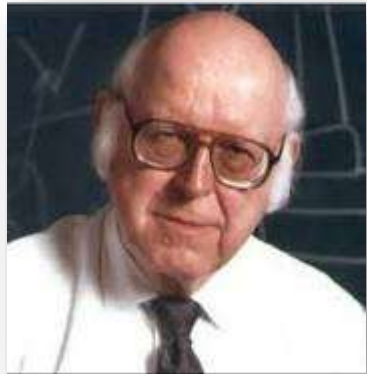
Artificial Intelligence Systems

- ▶ Systems that think as humans
 - Machines with minds
- ▶ Systems that act as humans
 - Do things that people do better
- ▶ Systems that think rationally
 - Right artificial reasoning
- ▶ Systems that act rationally
 - Automation of human behaviour



Fathers of Artificial Intelligence

Allen Newell



Ray Solomonoff



Arthur L. Samuel



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END

Thank's for watching
