## A timeline of artificial intelligence

The idea of artificial intelligence dates back to at least the 5th century B.C. But computers that perform difficult intellectual tasks did not appear until after World War II. Today, some scientists predict smart machines will be able to build better and more intelligent versions of themselves before the end of the century.



Inside of rare old clock

16th century: Clockmakers

make mechanical animals.

18th century: Inventors made mechanical toys.



Allen Newell and Herb Simon

1955: Allen Newell, J.C. Shaw and Herbert Simon run the first Al program, the Logic Theorist, at the Carnegie Institute of Technology, now Carnegie Mellon University.





Deep Blue

1990

1980

1997: The Deep Blue chess program beats then world chess champion Garry Kasparov in a widely followed match.

> 2000: Interactive robot pets - "smart toys" - become commercially available, realizing the vision of the 18th-century toy makers.

2000



5th century B.C.: Greek myths of Hephaestus incorporate the idea of robots.

17th century: Pascal created the first mechanical digital calculating machine in 1642.

1946: The first general purpose computer was the ENIAC, Electronic Numerical Integrator And Computer, which was built for the Army by the University of Pennsylvania during World War II and unveiled publicly.

**1962:** The first industrial robot company, Unimation, is founded.

1970

**1988:** CMU's Kai-Fu Lee develops the Sphinx Speech Recognition System, the first to recognize words spoken in real time by average people.

2002: CMU's Reid G. Simmons creates GRACE, a socially skilled, talking robot.

GRACE