



ARTIFICIAL INTELLIGENCE—THE NEXT BIG REVOLUTION IN COMPUTING



Computer scientists have been pursuing artificial intelligence (AI) since the 1950s. Here's why the age of artificial intelligence may finally be here.

THE DEFINITION OF AI IS EVOLVING

How People Used to See AI



The Turing Test

AI scientist Alan Turing's 1950 test required a computer to trick a human into thinking it is human. No AI program has passed the Turing test.



Video Game Non-player Characters

Enemies appear to act intelligently in response to algorithms created for the game world.



HAL 9000

Author Arthur C. Clarke's fictional sentient computer ran the Discovery One spacecraft.



Deep Blue

IBM's* real computer defeated world chess champ Garry Kasparov using brute force computing power.



Spam Filters

Once a programmed set of rules, today's spam filters use neural networks that learn to recognize junk mail.

Machine learning that can...

Adapt
based on experience



Sense

How Intel® Defines AI Today

Act



Reason

TECHNOLOGICAL ADVANCES THAT HAVE CHANGED THE AI LANDSCAPE



Modern Computer Architecture

Small, cheap multi-chip processors and modern code algorithms help programs solve big problems quickly.



Big Data

Today's intelligent programs learn by studying huge stores of digital data amassed in the Internet age.



Neural Networks

Neural nets organized in layers that process increasingly complex data learn abstract concepts more like our brains do.