Introduction to Artificial Intelligence

DA 221

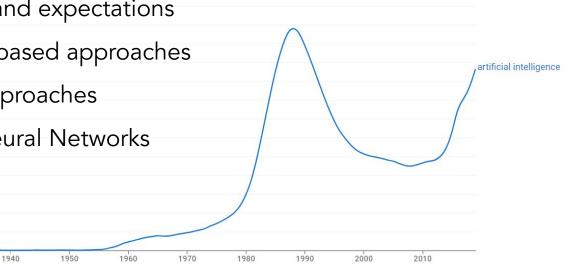
Jan - May 2023

IIT Guwahati

Instructors: Neeraj Sharma & Arghyadip Roy

Al History

- 1940 1950: Early days
- 1950 1970: Excitement and expectations
- 1970 1990: Knowledge-based approaches
- 1990 2005: Statistical approaches
- 2005 Present: Rise of Neural Networks



Let's start with getting aware of some Al developments

- When?
- Researchers?
- Problems addressed?
- Places and Companies?

MIND

A QUARTERLY REVIEW

OF

PSYCHOLOGY AND PHILOSOPHY

I.—COMPUTING MACHINERY AND INTELLIGENCE

By A. M. TURING





Alan Turing - Imitation Game - Can machines think?

The Autonomous-Car Chaos of the 2004 Darpa Grand Challenge

The self-driving vehicles smashed, burned, flipped, and tipped. But the ambitious race through the Mojave launched an industry.

https://www.wired.com/story/autonomous-car-chaos-2004-darpa-grand-challenge/



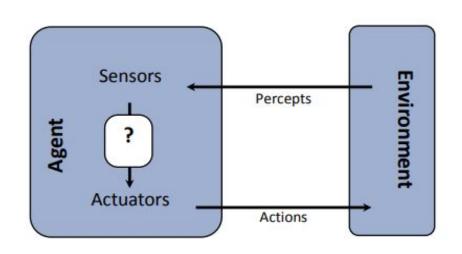
DARPA Grand Challenge: First Round



AlphaGo playing the game

Connecting these developments with the Intelligent Systems Framework

Artificial Intelligence



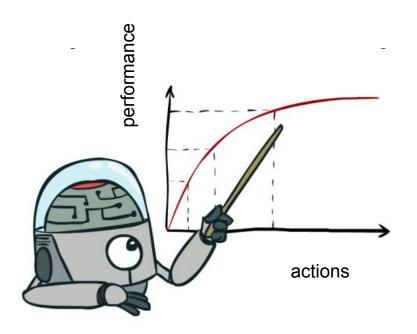
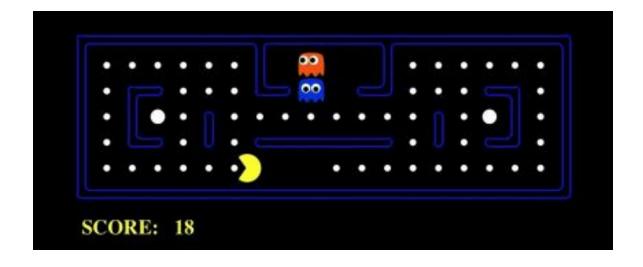


Image credits: CS188, UC Berkeley

Some examples

Pacman



Some more examples

Lets' pool some more example and how they fall into this framework

- Image classification
- Smart air conditioner
- Smart door opening system
- Chat bot
- Self-driving cars

