

# Introduction to Artificial Intelligence

**DA 221**

Jan - May 2023

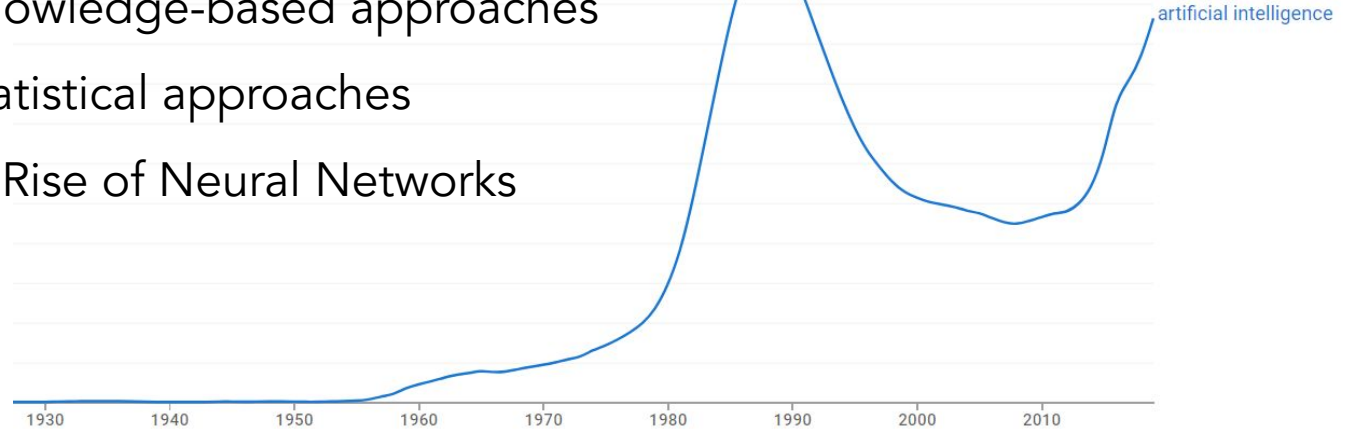
IIT Guwahati

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Lecture 2 - DA 221 - IIT G

# AI 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 AI developments

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

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[October, 1950

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

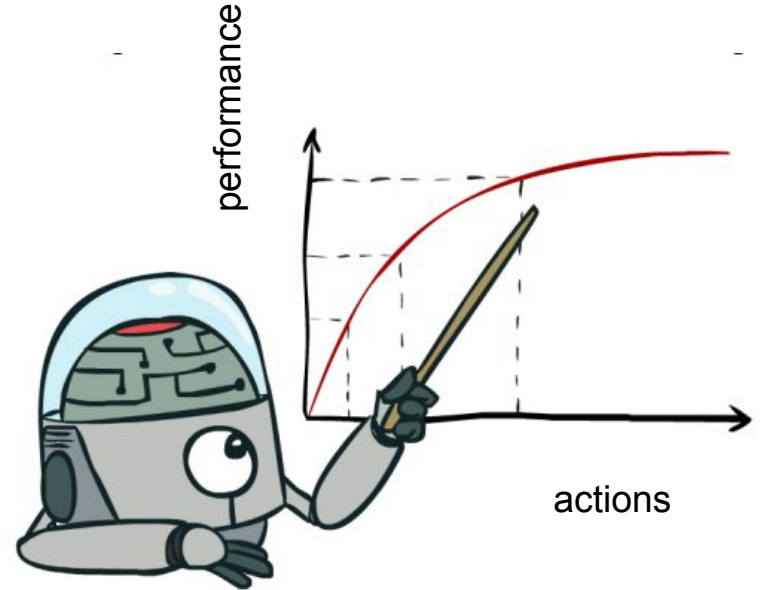
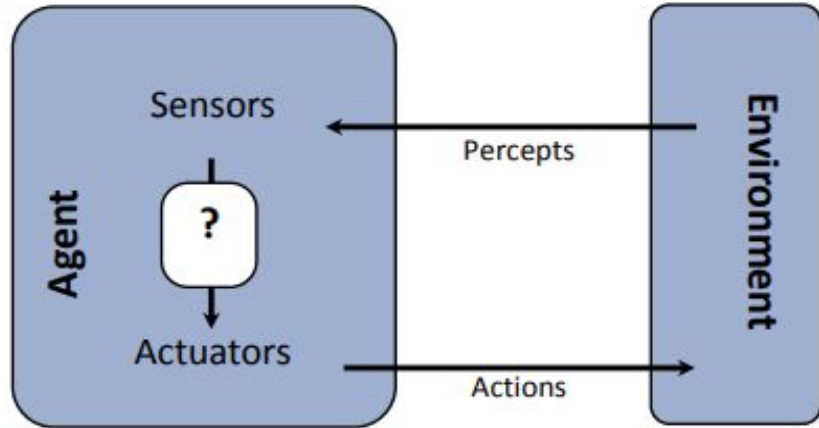


Image credits: CS188, UC Berkeley



# Some examples

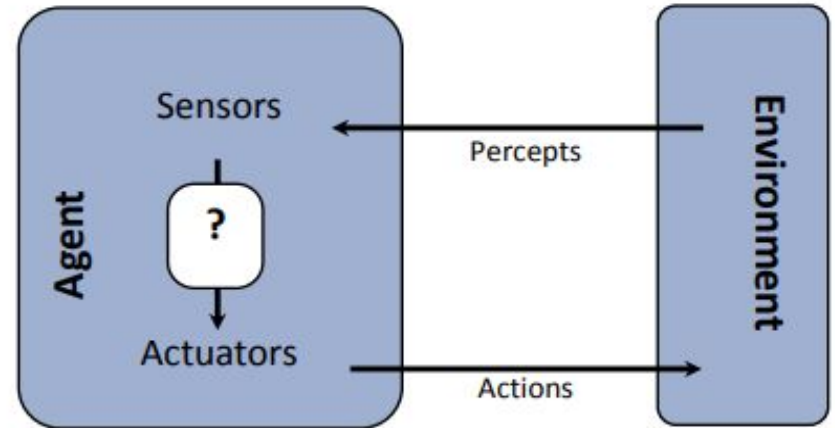
Pacman



# 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



*Thank you*