



ARTIFICIAL INTELLIGENCE

IT IS A FIELD OF RESEARCH IN COMPUTER SCIENCE THAT DEVELOPS AND STUDIES METHODS AND SOFTWARE THAT ENABLE MACHINES TO PERCEIVE THEIR ENVIRONMENT AND USE LEARNING AND INTELLIGENCE TO TAKE ACTIONS THAT MAXIMIZE THEIR CHANCES OF ACHIEVING DEFINED GOALS.

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WHAT IS INTELLIGENCE?

The ability to acquire and apply knowledge and skills.

Intelligence has been technologically divided into two categories. Such as:

- ▶ Artificial Intelligence (AI)
- ▶ Machine Learning (ML)

An “intelligent” computer uses AI to think like a human and perform tasks on its own.

INTRODUCTION TO AI

Artificial Intelligence

Is the field of study

Machine Learning

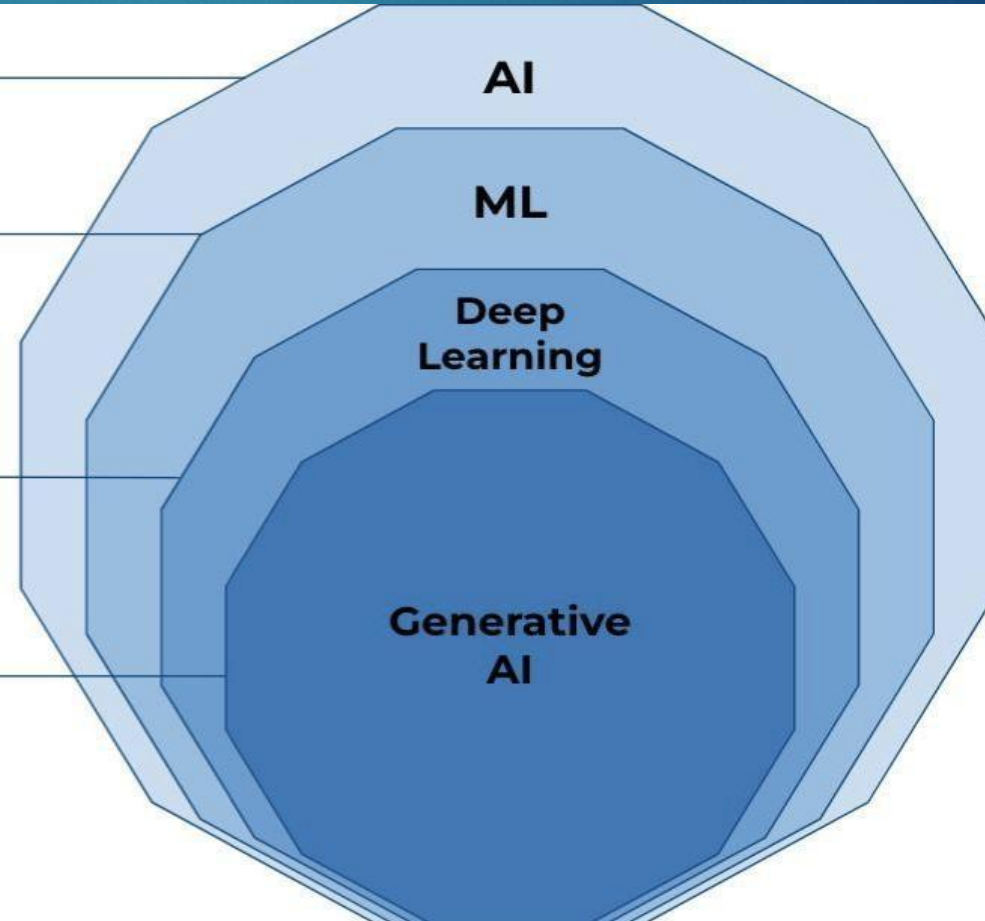
Is a branch of AI that focus on the creation of intelligent machines that learn from data.
Another very well know branch inside AI is **Optimization**.

Deep Learning

Is a subset of Machine Learning methods, based on **Artificial Neural Networks**.
Examples: CNNs, RNNs

Generative AI

A type of ANNs that generate data that is similar to the data it was trained on.
Examples: GANs, LLMs



ARTIFICIAL INTELLIGENCE

Artificial intelligence is the stimulation of human intelligence processes by machines, especially computer systems.



Building AI-Powered Applications

Smart Assistants

AI-powered virtual assistants that can understand natural language and perform a variety of tasks.

Predictive Analytics

AI models that can analyze data and make accurate predictions about future events or outcomes.

Autonomous Vehicles

Self-driving cars that use computer vision and deep learning to navigate roads and avoid obstacles.

Intelligent Automation

AI-powered systems that can automate repetitive tasks and streamline business processes.



The AI Development Lifecycle

1

Data Collection

Gather and curate high-quality data to train the AI models.

2

Model Training

Design, train, and optimize machine learning models using advanced algorithms.

3

Deployment

Integrate the AI models into production systems and applications.

Industry insights on AI

▶ Salary for AI Developers in India

- ▶ Entry-Level - ₹5-10 lakhs
- ▶ Mid-Level - ₹10-20 lakhs
- ▶ Senior-Level - ₹20-40 lakhs
- ▶ Salaries for AI developers in India can vary based on factors like experience, skill set, and location. Top-tier cities like Bangalore and Mumbai tend to offer higher



Resources: Artificial Intelligence

- ▶ COURSERA
 - ▶ UDEMY
 - ▶ edx
 - ▶ NPTEL
 - ▶ Youtube
 - 1. freecodecamp
 - 2. Two Minute Papers
 - 3. AI Explained
- (You can also explore more channels)

THANK
YOU!

