Artificial Intelligence



Artificial Intelligence

System or Machine that can emulate the thoughts of human beings ,identify their speech and interact with them.

Artificial: It is some things that is not ordinary, but is made using human skills. it implies creating a replica or simulation of human brain. Though you can make a machine unnaturally related to human beings.

Intelligence:

The machine can make its own decisions ,according to the situation

Intelligence

Intelligence is the ability to acquire and apply the knowledge.

Knowledge

Knowledge is the information acquired through experience

Experience

Experience is the knowledge gained through exposure(training)

Artificial intelligence as the "copy of something natural(i.e., human beings) 'WHO' are capable of acquiring and applying the information it has gained through exposure(Training)."

Intelligence is composed of

- Reasoning
- Learning
- Problem Solving
- Linguistic Intelligence

Artificial Intelligence: Using in Daily Life

Virtual Personal Assistants:

Siri, Google Now, and Cortana are all intelligent digital personal assistants on various platforms (iOS, Android, and Windows Mobile).

Recommendation systems

(facebook news feed, amazon product recommendation)

Object recognition and tracking

(facial recognition, license plate reading, and tracking)

Mining 'Big Data' -

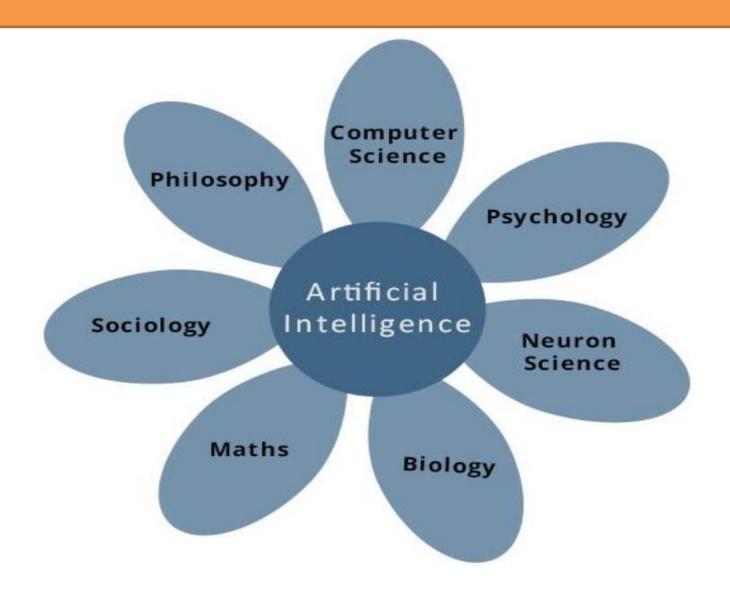
Analytics (stock with this pattern tend to go up)

Classification and Clusterin of data

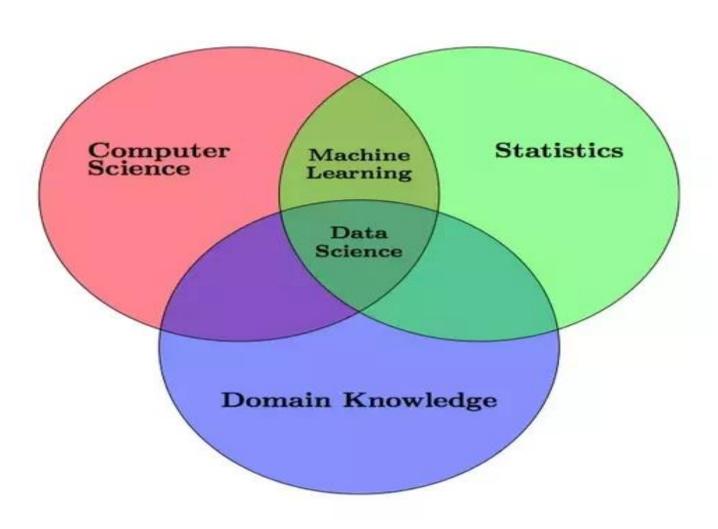
(fraud detection, sequence mining etc.)

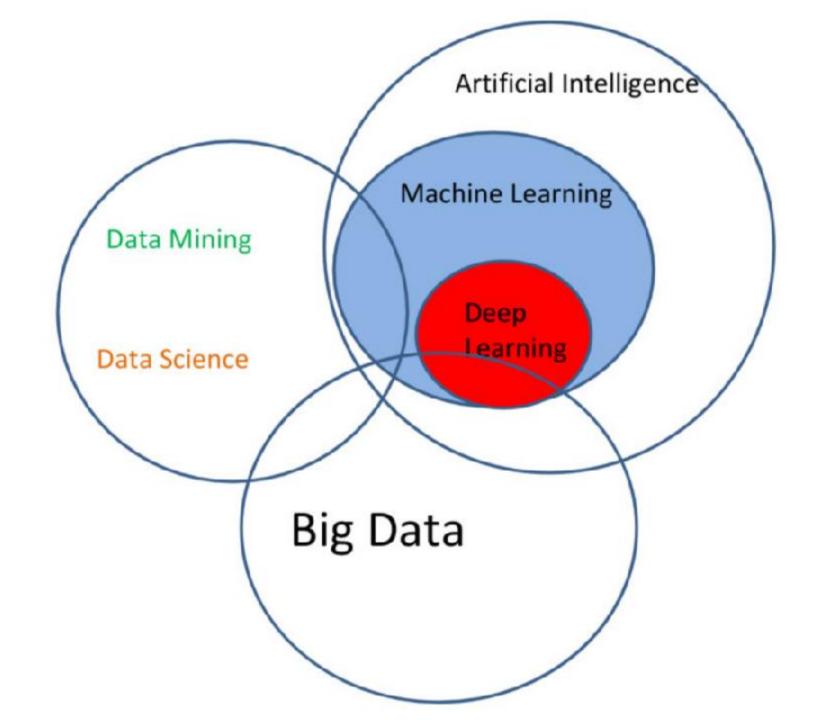
All of these things are based on the concept of learning from the past data and predicting the outcome for an unseen/new situation, the same way humans learn. But the advantage for computers is that they can process data at a much larger scale and with much larger complexity, something that is simply incomprehensible to humans

What Contributes to Al

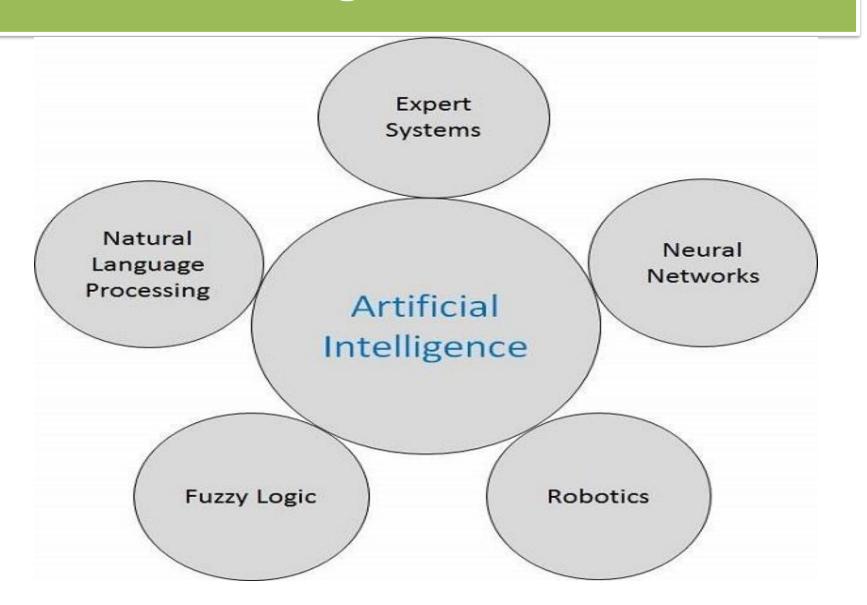


How To start learning artificial intelligence

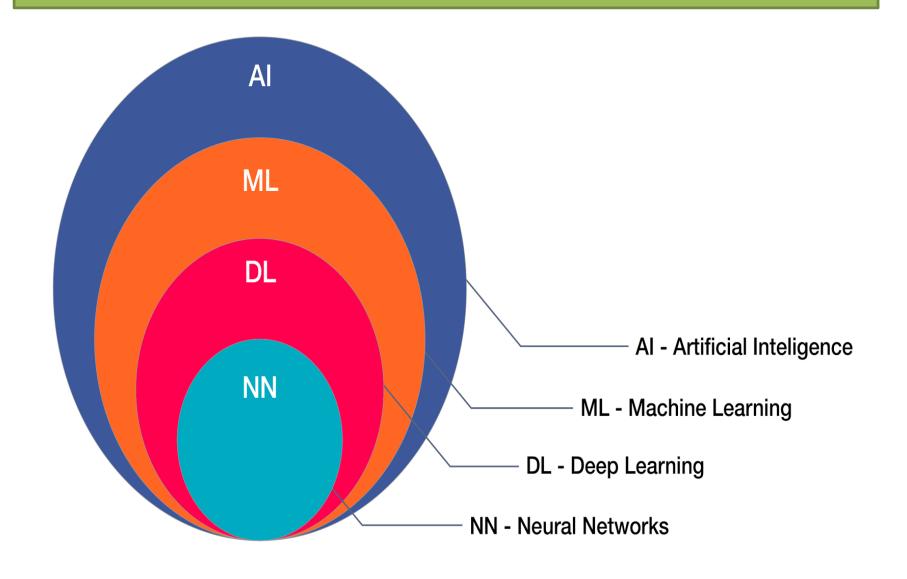




Artificial Intelligence - Research Areas



AI And ML



Artificial Intelligence

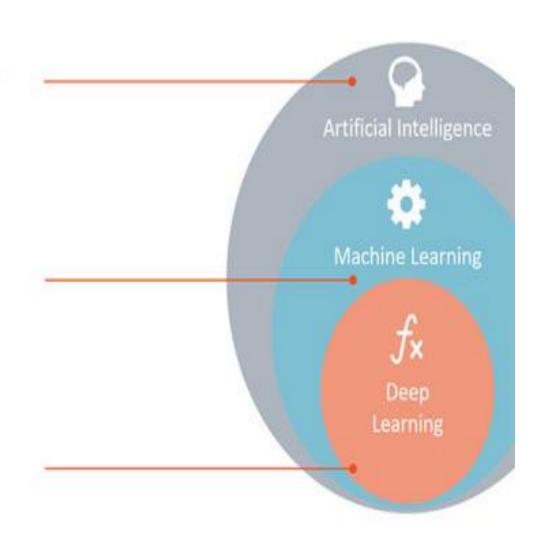
Any technique which enables computers to mimic human behavior.

Machine Learning

Subset of AI techniques which use statistical methods to enable machines to improve with experiences.

Deep Learning

Subset of ML which make the computation of multi-layer neural networks feasible.



Machine Learning:

"Machine Learning" is where computer algorithms are used to autonomously learn from data and information and improve the existing algorithms"

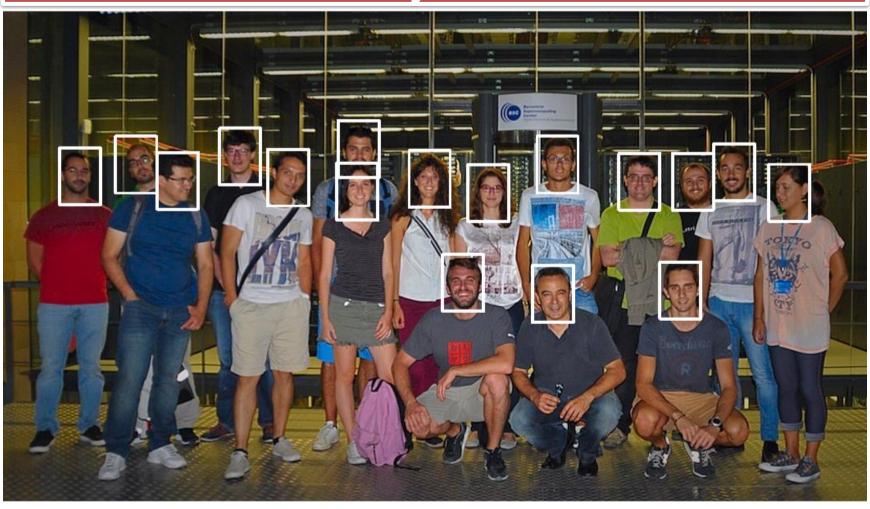
Machine learning is a particular approach to artificial intelligence.

ML is, unsurprisingly, the learning part of AI.

Self-Learning algorithms that learn models from data

Instead of giving the computer a set of instructions on how to do something, we give it instructions on how to learn to do something.

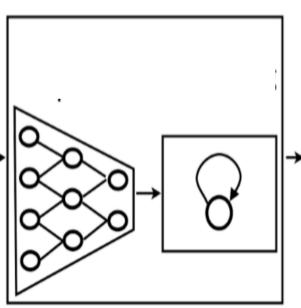
ML enabled computers to recognize objects



The question now is

Whether machines can tell ,what's actually going on in such image





A Group of people shopping at an outdoor market. There are many Vegetables at the fruit stand



Example



Example

- 1. Give him a chess board
- 2. Explain the basic rules of the game
- 3. Give records ,book
- 4. Lock the kid in a room (throw in some food and water as well)

