

-
- **Artificial intelligence vs Machine learning**
 - **Datasets for Machine Learning**



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Machine Learning

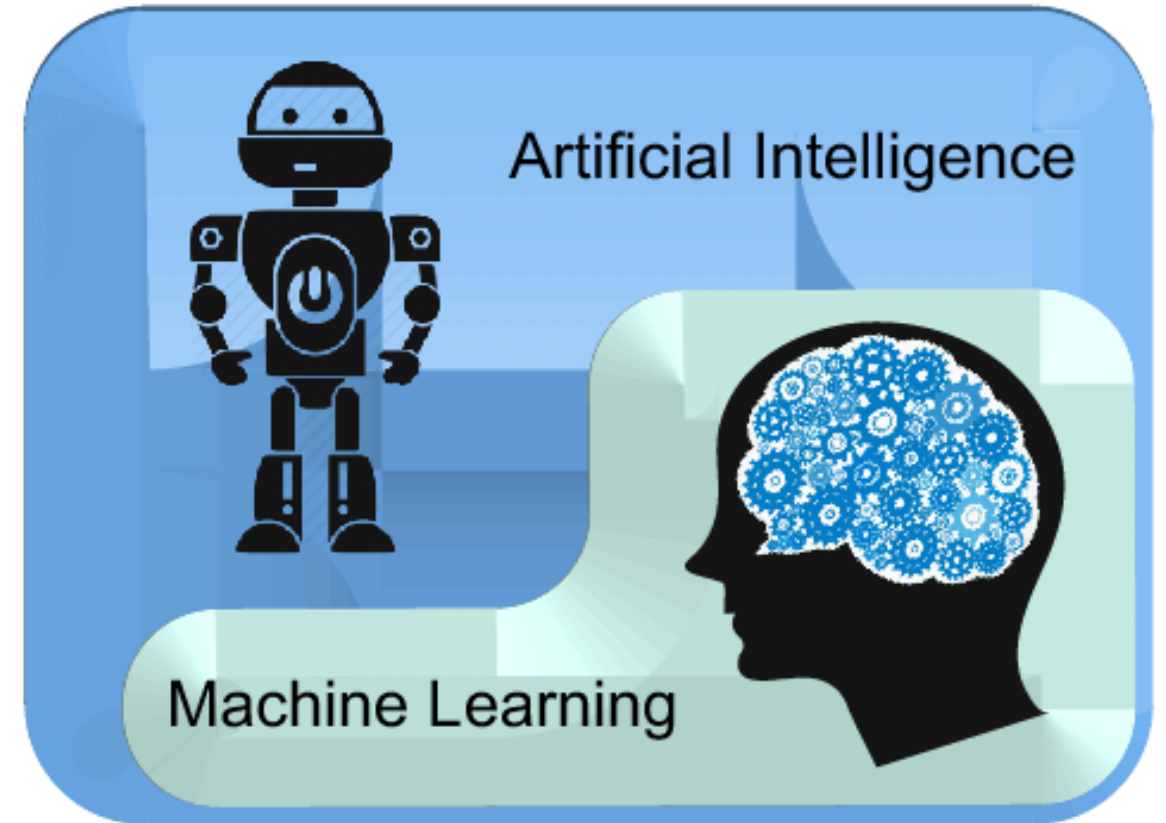
DIFFERENCE BETWEEN AI AND ML

Artificial intelligence and machine learning are the part of computer science that are correlated with each other. These two technologies are the most trending technologies which are used for creating intelligent systems.

Although these are two related technologies and sometimes people use them as a synonym for each other, but still both are the two different terms in various cases.

DIFFERENCE

- On a broad level, we can differentiate both AI and ML as:
- AI is a bigger concept to create intelligent machines that can simulate human thinking capability and behaviour, whereas, machine learning is an application or subset of AI that allows machines to learn from data without being programmed explicitly.



ARTIFICIAL INTELLIGENCE

Artificial intelligence is a field of computer science which makes a computer system that can mimic human intelligence.

It is comprised of two words "Artificial" and "intelligence", which means "a human-made thinking power." Hence we can define it as,

Artificial intelligence is a technology using which we can create intelligent systems that can simulate human intelligence.

The Artificial intelligence system does not require to be pre-programmed, instead of that, they use such algorithms which can work with their own intelligence.

ARTIFICIAL INTELLIGENCE

It involves machine learning algorithms such as Reinforcement learning algorithm and deep learning neural networks.

AI is being used in multiple places such as Siri, Google's AlphaGo, AI in Chess playing, etc.

Based on capabilities, AI can be classified into three types:

Weak AI

General AI

Strong AI

Currently, we are working with weak AI and general AI. The future of AI is Strong AI for which it is said that it will be intelligent than humans.

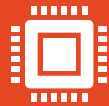
MACHINE LEARNING



Machine learning is about extracting knowledge from the data. It can be defined as,



Machine learning is a subfield of artificial intelligence, which enables machines to learn from past data or experiences without being explicitly programmed.



Machine learning enables a computer system to make predictions or take some decisions using historical data without being explicitly programmed.



Machine learning uses a massive amount of structured and semi-structured data so that a machine learning model can generate accurate result or give predictions based on that data.

MACHINE LEARNING

Machine learning works on algorithm which learn by its own using historical data. It works only for specific domains such as if we are creating a machine learning model to detect pictures of dogs, it will only give result for dog images, but if we provide a new data like cat image then it will become unresponsive

Machine learning is being used in various places such as for online recommender system, for Google search algorithms, Email spam filter, Facebook Auto friend tagging suggestion, etc.

It can be divided into three types:

Supervised learning

Reinforcement learning

Unsupervised learning

KEY DIFFERENCE BETWEEN AI AND ML

AI is working to create an intelligent system which can perform various complex tasks.

Machine learning is working to create machines that can perform only those specific tasks for which they are trained.

AI system is concerned about maximizing the chances of success.

Machine learning is mainly concerned about accuracy and patterns.

The main applications of AI are Siri, customer support using chatbots, Expert System, Online game playing, intelligent humanoid robot, etc.

The main applications of machine learning are Online recommender system, Google search algorithms, Facebook auto friend tagging suggestions, etc.

On the basis of capabilities, AI can be divided into three types, which are, Weak AI, General AI, and Strong AI.

Machine learning can also be divided into mainly three types that are Supervised learning, Unsupervised learning, and Reinforcement learning.

It includes learning, reasoning, and self-correction.

It includes learning and self-correction when introduced with new data.



THANK YOU

