

About AI

Artificial Intelligence, also known as AI, is the ability of a digital computer or computer-controlled robot to perform tasks commonly associated with intelligent beings. Artificial intelligence (AI) refers to the simulation of human intelligence in machines that are programmed to think like humans and mimic their actions. The term may also be applied to any machine that exhibits traits associated with a human mind such as learning and problem-solving.

The ideal characteristic of artificial intelligence is its ability to rationalize and take actions that have the best chance of achieving a specific goal. A subset of artificial intelligence is machine learning, which refers to the concept that computer programs can automatically learn from and adapt to new data without being assisted by humans. Deep learning techniques enable this automatic learning through the absorption of huge amounts of unstructured data such as text, images, or video.

In Supervised learning, you train the machine using data which is well “labeled.” It means some data is already tagged with the correct answer. It can be compared to learning which takes place in the presence of a supervisor or a teacher. A supervised learning algorithm learns from labeled training data, helps you to predict outcomes for unforeseen data. Successfully building, scaling, and deploying accurate supervised machine learning Data science model takes time and technical expertise from a team of highly skilled data scientists. Moreover, Data scientist must rebuild models to make sure the insights given remains true until its data changes.

Unsupervised learning is a machine learning technique, where you do not need to supervise the model. Instead, you need to allow the model to work on its own to discover information. It mainly deals with the unlabeled data.

Unsupervised learning algorithms allow you to perform more complex processing tasks compared to supervised learning. Although, unsupervised learning can be more unpredictable compared with other natural learning deep learning and reinforcement learning methods.

The applications for artificial intelligence are endless. The technology can be applied to many different sectors and industries. AI is being tested and used in the healthcare industry for dosing drugs and different treatment in patients, and for surgical procedures in the operating room.

Frameworks of AI include Tensorflow, Pytorch, Keras, Theano, Microsoft Cognitive Toolkit, Caffe, Amazon Machine Learning, Torch, Accord.Net, Apache Mahout, Spark Mlib

Terminologies related to AI: Natural Language Processing (NLP), Artificial Intelligence (AI), Machine Learning, Deep Learning, Neural Network, Supervised Learning, Unsupervised Learning, Reinforcement Learning