



What is Data Science, Artificial Intelligence and Machine Learning?

Artificial Intelligence: Artificial intelligence is a technology which enables a machine to simulate human behaviour. The main goal is to make a computer system smart enough to solve complex problems like humans do.

The Artificial intelligence system does not require to be pre-programmed, instead, they use such algorithms which can work with their own intelligence. It involves machine learning algorithms such as Reinforcement learning algorithm and deep learning neural networks.

AI is the general discipline where we program the computer to adjust its behaviour rather than explicitly programming the behaviour itself. It includes learning, reasoning, and self-correction. AI completely deals with Structured, semi-structured, and unstructured data. The main applications of AI are personal assistants, customer support using chatbots, online game playing, intelligent humanoid robot, etc.

Machine learning and deep learning are the two main subsets of AI.

Machine Learning: 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. It creates machines that can perform only those specific tasks for which they are trained.

It includes learning and self-correction when introduced with new data. Machine learning deals with Structured and semi-structured data. 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.

Data Science: Data science is the science of using math and human ingenuity to extract insights from data. Data science is an interdisciplinary field, often described as the intersection between statistics, programming, and domain knowledge.

Data Science is understanding existing data whereas, Machine Learning is about generalizing from data to build question answering machines (QuAM).

▼ Related Course/Tutorial Name

- Machine Learning: Algorithms in the Real World Specialization, C01 - Introduction to Applied Machine Learning

▼ Related Blogs & Articles

<https://towardsdatascience.com/an-introduction-to-deep-learning-af63448c122c>