

Machine Learning Basics

How does machine learn?

The machine builds a logic/algorithm based on the outcome of training data. The machine keeps learning from its mistakes & keeps improving the algorithm making the algorithm generalised.

What is Inductive Inference?

It's the process of building generalized knowledge from a given set of examples to make predictions about new & unseen examples.

What is Machine Learning?

ML is a domain of artificial intelligence where we extract patterns from the data and analyze the data and make intelligent predictions on the new data according to the pattern your machine has learnt.

Steps done by Machine Learning System?

- **Scoping :-** Here we simply try to understand the problem statement & the key requirements for the ML project.
- **Data :-** Here we collect, validate, clean & process the data
- **Modelling:-** Here we try to find patterns in the data. Based on the research we build an algorithm. Later we select & train the model & conduct error analysis.

○ **Deployment** :- Here we put the model in production. Then we monitor & maintain the system.

What is supervised learning?

It's a process of analysing the answers for a given question & get trained to find the answer of similar questions.

Different types of supervised learning?

Regression :- Here the target value is continuous (not fixed)

Classification :- Here the target value is discrete (set of fixed values)