

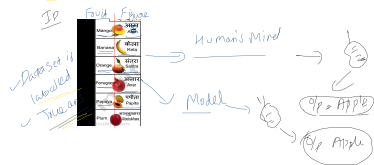
Neural Networks

Learning based Algorithms

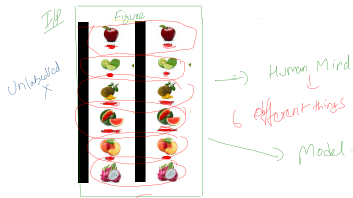


To mimic Human mind

Supervised Learning Algo



Unsupervised Learning Algorithms



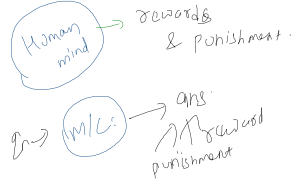
Supervised Learning

- In a supervised learning model, the dataset which is fed to the machine is labelled.
- In other words, we can say that the dataset is known to the person who is training the machine only then he/she is able to label the data.
- A label is some information which can be used as a tag for data.

Unsupervised Learning

- An unsupervised learning model works on unlabelled dataset. This means that the data which is fed to the machine is random and there is a possibility that the person who is training the model does not have any information regarding it.
- The unsupervised learning models are used to identify relationships, patterns and trends out of the data which is fed into it.
- It helps the user in understanding what the data is about and what are the major features identified by the machine in it.

Reinforcement Learning



→ RL is an area of Machine Learning concerned with how software agents ought to take actions in an environment in order to maximize some notion of cumulative reward.

RL is one of the three basic ML paradigms, alongside supervised & unsupervised learning.

→ In RL, the machine is not given examples of correct input-output pairs, but a method is provided to the machine to measure its performance in the form of a reward.

→ Reinforcement learning methods resemble how humans & animals learn, the machine carries out numerous activities and gets rewarded whenever it does something well.

Ex - Amazon Web Services (AWS) Deep Racer