## **Machine learning:**

Applications:
Manufacturing
Ecommerce

Google lens

Fraud or real transactions

Al uses both ML ,NLP and DL Eg:Chatbot

MI is the study of algorithms that improve their performance p, at a task T, with experiences E

Example 1:

Task T:

Recognizing face of image.

Experience E: Set of images Performance P:

Correctly recognizing a face.

ML Algorithms:

Supervised and unsupervised Supervised:input data is labeled Unsupervised:Input data is unlabelled

Semi supervised learning:

Both labelled and unlabellhedeg:medical imaging

Reinforcement:

Games and robotics

Reward based learning

**Supervised learning:** 

Regression and classification

**Unsupervised:** 

Clustering

**Linear regression:** 

Simple

Regression model tend to predict a continuous value as an output

X as input and y as output value in a linear equation.

## **Classification:**

Classify Spam or not spam incoming emails

In regression output is continuous value In classification output is discrete

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