# Introduction

## Machine Learning

* Subfield of Computer Science concerned with building algorithms.
* It is a process of solving a practical problem
* By gathering a dataset
* Algorithmically building a statistical model based on that dataset.

## Types of Learning

### Supervised Learning

* Collection of labelled examples in a dataset.
* Example: Predicting if a person has cancer or not

### Unsupervised Learning

* Collection of unlabeled examples in a dataset.
* Example: Clustering

### Semi-Supervised Learning

* Dataset consists of both labelled and unlabeled examples.
* Helps to compute a better model
* Number of unlabeled examples is more than labelled examples.

### Reinforcement Learning

* Goal of this algorithm is to learn a policy.