

18<sup>th</sup> Oct 2019

- Machine Learning
- Types
  - Supervised classification
  - Unsupervised clustering
  - regression

Dataset

Samples

Features

Target / Label

numerical  
categorical

Feature Selection & Transformation.

Algorithm  $\rightarrow$  Prediction model

Training

Testing  
Validation

iteration epoch  
batch mini batch

Test Train Split

Confusion Matrix

		Predictions	
		N	Y
Actual	N	TN	FP
	Y	FN	TP

Evaluation Measures

Accuracy :

$$\frac{TN + TP}{TN + FP + FN + TP}$$

$$\frac{5}{2} \mid \frac{3}{10}$$

Sensitivity :

$$\frac{TP}{TP + FP}$$

Specificity, Positive Predictive Value, Negative Predictive Value