Machine Learning

27 April 2022   16:54

Supervised ML
- Used to solve problems like predictions, recognitions
- All supervised models need labelled data
- Supervised models are trained with training data, most of algorithms do not memorize the training data (except few e.g.KNN), they learn patterns, they store pattern in the form of some mathematical equations / rules.
- All supervised (no exceptions) once trained are deployed to production to make predictions, these models do not learn and do not improve in production. They only make predictions in production, they stay static in production.
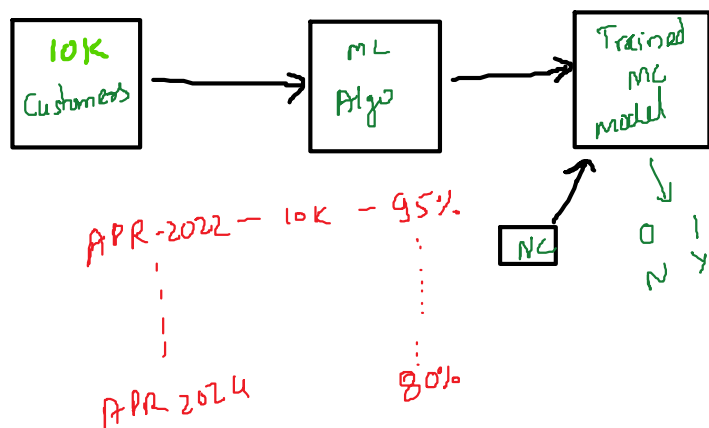
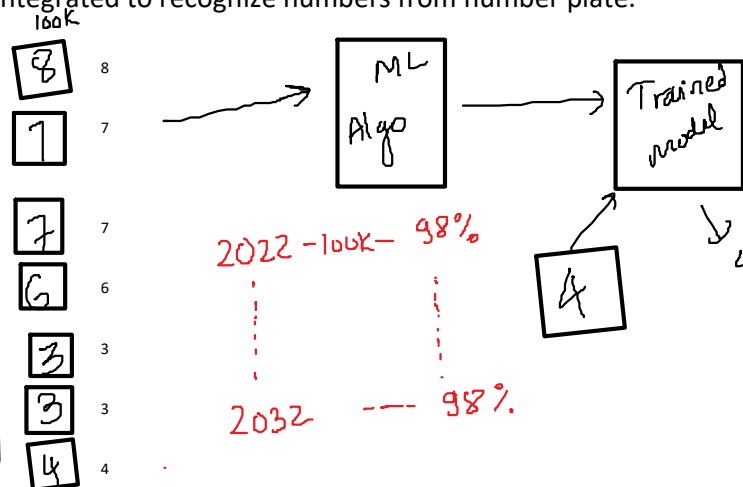Linear Regression ⟶ Algo
⦙
⦙ Python
obj ⟶ Linear Reg.
↑
model

Case1: Banking customer churn prediction
Objective: to build an ML model which can be used to predict for any customer, whether customer will leave the bank or will not leave the bank.

Case2: AVNPR: Automated Vehicle Number plate recognition
Objective: to build an ML model which can be used to recgnize digits from the given image, so that it can be further integrated to recognize numbers from number plate.

10K Customers → ML Algo → Trained ML model

APR-2022 — 10K — 95%.
⦙
APR 2024   80%

NO

O 1
N Y

100K
8   8
7   7
7   7
6   6
3   3
3   3
4   4

→ ML Algo → Trained model

2022 – 100K — 98%
2032 --- 98%.

4

Clustering