Ensemble Techniques

Regression Bagging ⟶ Bootstrapped Aggregation

final
Prediction
specific

2.3 cr	3.2 cr	4.7 cr	1.3 cr
0 ←	0 ✓	0 ✓	0 ✓	1 ✓

Majority
Voting

$M_1 = M_2 = ⟶$

$M_3 = M_4 =$

Predictors (e.g., classifiers)

Training

M_1 M_2 M_3 M_4

Random sampling
(with replacement = bootstrap)

Training set
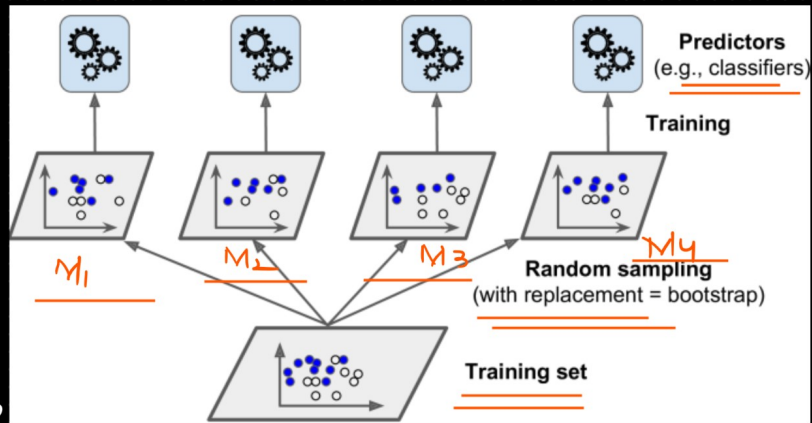
same models

(all of them belongs to KNN,

LR, DT & so on)

Random forest ⟶ Bagging Technique

↳ Decision
Tree

↳ n_estimators

Single Model

Bagging Model

Pros
_____

Enhance the accuracy of the given model.

→ Reduce the overfitting Problem in a model

Reduce variance without increase in the bias

→ Computationally cheeper task

(Random sample)

(Subset of the dataset)

Cons ⟶ Interpretability of model