

Random Forest

1. Bootstrapping (Sampling with Replacement)

Randomly select subset of data (with replacement) from the original dataset to create multiple training sets. Each subset may have some repeated samples while others may be missing.

2. Building Decision Trees

For each bootstrapped dataset, train a decision tree. At each node, instead of considering features, a random subset of features is selected for splitting.

3. Tree Growth

All each decision tree to grow fully without pruning, i.e., each tree is built until all data points are perfectly classified, or the tree reaches maximum depth.

4. Making Predictions

Once all trees are trained, we each tree to make predictions. For classification, the majority vote of all trees determines the final class. For regression, the average of all trees predictions is taken.

5. Final Prediction (Aggregation)

Combine the individual predictions from all trees. For classification, this involves majority voting. For regression, it's average of the predictions.

6. Model Evaluation

6. Model Evaluation
Evaluate the performance of the Random Forest model using metrics such as accuracy (for classification) or mean squared error (MSE) (for regression).

16.04

Day	Time	Location	Weather	Temp	Wind
1st	10:00	St. Louis	Clear	60	0
2nd	10:00	St. Louis	Clear	60	0
3rd	10:00	St. Louis	Clear	60	0
4th	10:00	St. Louis	Clear	60	0
5th	10:00	St. Louis	Clear	60	0
6th	10:00	St. Louis	Clear	60	0
7th	10:00	St. Louis	Clear	60	0
8th	10:00	St. Louis	Clear	60	0
9th	10:00	St. Louis	Clear	60	0
10th	10:00	St. Louis	Clear	60	0

:(29.05.2020) me milis

