

Random Forest Classification

Confusion Matrix:

[[78 7]

[6 43]]

Accuracy

What is the percentage of correct classification of both (Purchased & Not Purchased) to the total input of the test set? 0.90

Recall (Sensitivity / True Positive Rate)

What is the percentage of correct classification of (Purchased) to the total input of (Purchased) in the test set? 0.92

What is the percentage of correct classification of (Not Purchased) to the total input of (Not Purchased) in the test set? 0.88

Precision

What is the percentage of correct classification of (Purchased) to the total predicted as (Purchased)? 0.93

What is the percentage of correct classification of (Not Purchased) to the total predicted as (Not Purchased)? 0.86

F1-Score

What is the overall performance of Purchased class? 0.92

What is the overall performance of Not Purchased class? 0.87

Averaging Metrics

Macro Average (unweighted mean)

What is the average performance of Precision (across both classes)? 0.89

What is the average performance of Recall (across both classes)? 0.90

What is the average performance of F1-Measure (across both classes)? 0.90

Weighted Average (based on support/class frequency)

What is the weighted average Precision of the model? 0.90

What is the weighted average Recall of the model? 0.90

What is the weighted average F1-Measure of the model? 0.90