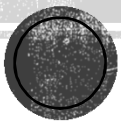
RANDOM FOREST CLASSIFIER

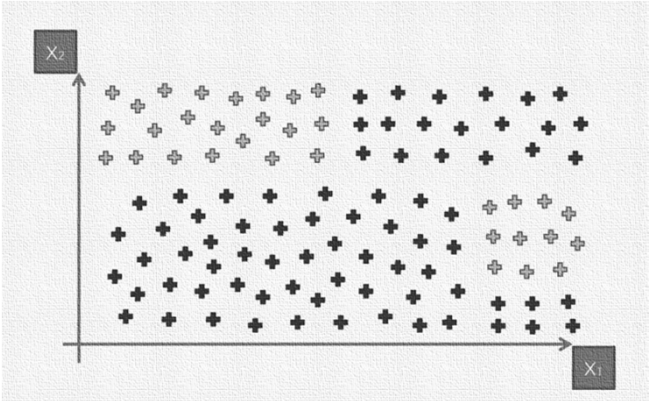
Mohan M J



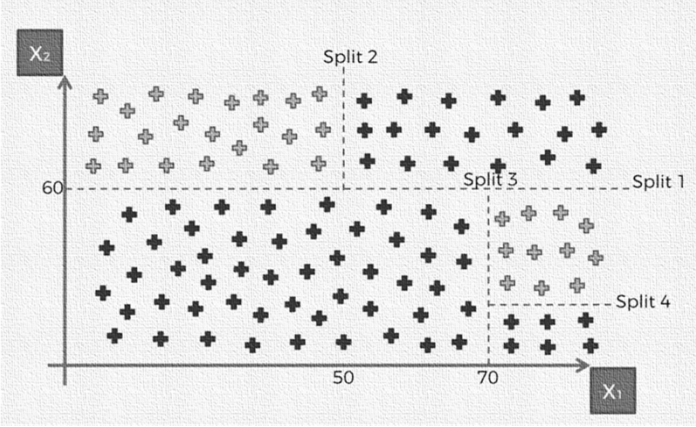
INTUITION

- Step 1: Pick random k data points from the training set
- Step 2: Build the decision tree associated to these k data points
- Step 3: Choose the number of Ntrees you want to build and repeat Step 1 & Step 2
- Step 4: For a new data point, make each one of your Ntrees predict the category to which the data points belongs and assign the new data point to the category that wins the majority vote

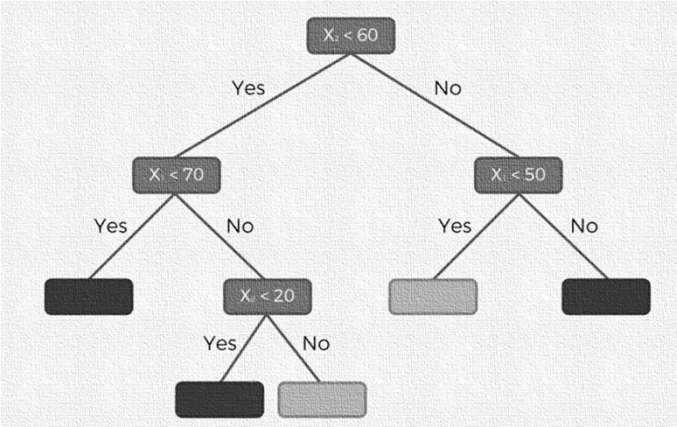
CONTD..



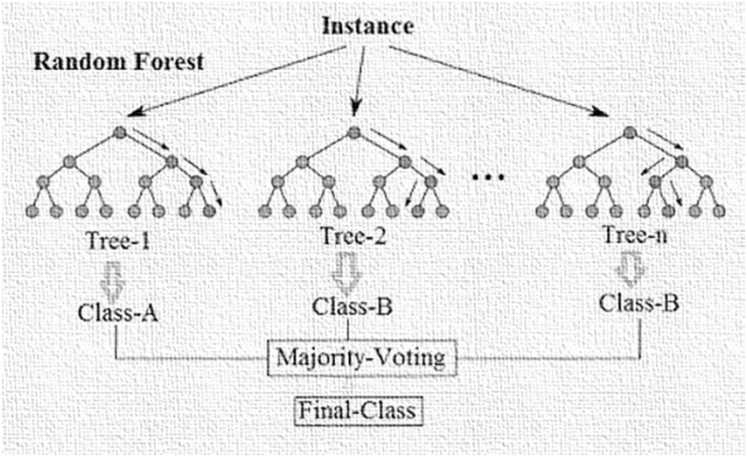
SPLIT THE DATASET



DECISION TREE



RANDOM FOREST



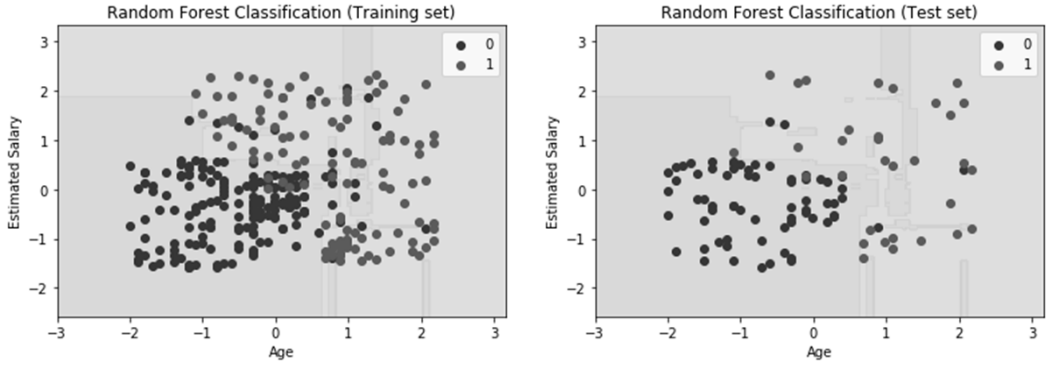
CONTD..

- ENSEMBLE LEARNING
- Build decision trees from randomly sampled points from the data

PYTHON CODE

```
# Fitting Random Forest Classification to the Training set
from sklearn.ensemble import RandomForestClassifier
classifier = RandomForestClassifier(n_estimators = 10, criterion =
'entropy', random_state = 0)
classifier.fit(X_train, y_train)
```

VISUALIZE



THANK YOU