Random Forest Classifier

Q.What is the percentage of correct classification of both with respect to total data?

Ans.Accuracy is (78+44)/(78+7+5+44) = 122/134 =0.91

Q.What is the percentage of correct classification of non-buyers with respect to total users?

Ans.Recall of non-buyers

ie,

(78)/( 78+7)=>0.92

Q.What is the percentage of correct classification of buyers with respect to total users?

Ans.Recall of buyers

ie,

(44)/( 49)=>0.90

Q.What is the percentage of correct classification of non-buyers with respect to all classification of non-buyers?

Ans. Precision of non-buyers

ie,

(78)/( 78+5)=>0.94

Q. What is the percentage of correct classification of buyers with respect to all classification of buyers?

Ans.Precision of buyers

ie,

(44)/( 44+7)=>0.86

F1 value of Buyers = 2\*precision\*accuracy/recall+precison = 2\*0.86\*0.9/(0.86+.9)=1.548/1.76=0.88

F1 value of Buyers = 2\*precision\*accuracy/recall+precison = 2\*0.92\*0.94/(0.92+.94)=1.73/1.86=0.93

Decision Tree Classifier

Q.What is the percentage of correct classification of both with respect to total data?

Ans.Accuracy is (75+45)/(75+45+8+6) = 120/134 =0.895

Q.What is the percentage of correct classification of non-buyers with respect to total users?

Ans.Recall of non-buyers

ie,

(75)/( 75+6)=>0.93

Q.What is the percentage of correct classification of buyers with respect to total users?

Ans.Recall of buyers

ie,

(45)/( 53)=>0.85

Q.What is the percentage of correct classification of non-buyers with respect to all classification of non-buyers?

Ans. Precision of non-buyers

ie,

(75)/( 75+8)=>0.90

Q. What is the percentage of correct classification of buyers with respect to all classification of buyers?

Ans.Precision of buyers

ie,

(45)/( 45+6)=>0.88

F1 value of Buyers = 2\*precision\*accuracy/recall+precison = 2\*0..85\*0.88/(0.85+.88)=1.496/1.73=0.86

F1 value of Buyers = 2\*precision\*accuracy/recall+precison = 2\*0.92\*0.94/(0.92+.94)=1.7296/1.86=0.93

Support Vector Machine

Q.What is the percentage of correct classification of both with respect to total data?

Ans.Accuracy is (78+20)/( 78+20+33+3) = 98/134 =0.73

Q.What is the percentage of correct classification of non-buyers with respect to total users?

Ans.Recall of non-buyers

ie,

(78)/( 78+3)=>0.96

Q.What is the percentage of correct classification of buyers with respect to total users?

Ans.Recall of buyers

ie,

(20)/( 53)=>0.38

Q.What is the percentage of correct classification of non-buyers with respect to all classification of non-buyers?

Ans. Precision of non-buyers

ie,

(78)/( 78+33)=>0.70

Q. What is the percentage of correct classification of buyers with respect to all classification of buyers?

Ans.Precision of buyers

ie,

(20)/( 20+3)=>0.87

F1 value of Buyers = 2\*precision\*accuracy/recall+precison = 2\*0.87\*0.37/(0.87+.37)=0.644/1.24=0.52

F1 value of Buyers = 2\*precision\*accuracy/recall+precison = 2\*0.7\*0.96/(0.7+.96)=1.344/1.66=0.81