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