

CS529: SNA Stage 2: Link Prediction Part I

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The different values for five-folds cross validation on different classification models were as follows:

1) Decision Tree

Correct predictions --> 252
Precision score --> 0.625
Recall score --> 0.6122448979591837
Accuracy score --> 0.63
AUC --> 0.6296518607442977

Correct predictions --> 263
Precision score --> 0.7046632124352331
Recall score --> 0.6296296296296297
Accuracy score --> 0.6575
AUC --> 0.6599235104669888

Correct predictions --> 260
Precision score --> 0.635
Recall score --> 0.654639175257732
Accuracy score --> 0.65
AUC --> 0.6501351216094484

Correct predictions --> 254
Precision score --> 0.6307692307692307
Recall score --> 0.6243654822335025
Accuracy score --> 0.635
AUC --> 0.6348428396389187

Correct predictions --> 264
Precision score --> 0.6502463054187192
Recall score --> 0.6700507614213198
Accuracy score --> 0.66
AUC --> 0.6601485334200196

2) SVM

Correct predictions --> 266
Precision score --> 0.6447876447876448
Recall score --> 0.7990430622009569
Accuracy score --> 0.665
AUC --> 0.6586838347653998

Correct predictions --> 280
Precision score --> 0.6628352490421456
Recall score --> 0.8439024390243902
Accuracy score --> 0.7
AUC --> 0.6963101938711694

Correct predictions --> 265
Precision score --> 0.6217228464419475
Recall score --> 0.83
Accuracy score --> 0.6625
AUC --> 0.6625

Correct predictions --> 241
Precision score --> 0.5802919708029197
Recall score --> 0.7832512315270936
Accuracy score --> 0.6025
AUC --> 0.5997474431747143

Correct predictions --> 254
Precision score --> 0.5672727272727273
Recall score --> 0.8524590163934426
Accuracy score --> 0.635
AUC --> 0.6520359598096246

3) Naive Bayes

Correct predictions --> 265
Precision score --> 80.53097345132744
Recall score --> 44.6078431372549
Accuracy score --> 0.6625

Correct predictions --> 269
Precision score --> 81.73076923076923
Recall score --> 43.14720812182741
Accuracy score --> 0.6725

Correct predictions --> 263
Precision score --> 79.82456140350878
Recall score --> 44.390243902439025
Accuracy score --> 0.6575

Correct predictions --> 258
Precision score --> 76.69902912621359
Recall score --> 40.10152284263959
Accuracy score --> 0.645

Correct predictions --> 267
Precision score --> 79.0909090909091
Recall score --> 44.16243654822335
Accuracy score --> 0.6675