$PS10_K ontchou$

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1 Optimal Values

model	f1test.mean	gmean.test.mean
Trees	0.8952320	0.6516836
Logit	0.8630524	0.0000000
NeuralNet	0.9066309	0.757076
kNN	0.8986300	0.7471255

2 Out of Sample Results

model	f1	mean
Trees	0.8968421	0.6730932
Logit	0.8986422	0.6762722
NeuralNet	0.9077090	0.7626595
kNN	0.8987354	0.7567329
NaiveBayes	0.8841864	0.7259584

3 Explanation

The optimal values for Logit Model also included lambda=0.201; alpha=0.451. Optimal values for Neural Net included size=10; decay=0.303; maxit=1000. Although I didn't get any error messages, computer could not tune the SVM model for some reason. Everytime I tried R just froze, and I had to restart either R or the computer itself. Hopefully, you have better luck. Everything else in the code ran just fine.