EECS 738 lab3 report Zaikun Xu

1.table of performance for the three model

model with parameters

Parameters\Model	Random Forest
NumFeature: 1	0.0815
NumFeature: 10	0.0768
NumFeature: 100	0.0635
NumTrees:2	0.0926
NumTrees:20	0.0771
NumTrees:200	0.0799
Parameters\Model	AdaBoostM1
NumIteration: 10	0.1759
NumFeature: 50	0.1196
NumFeature: 100	0.0981
Classifier: Random Forest	0.0356
Classifier: Naïve Bayes	0.0459
Classifier: Random Tree	0.0559
Parameters\Model	RBF
NumCluster: 2	0.4243
NumCluster: 20	0.3249
NumCluster: 40	0.2384
Ridge: 1e-10	0.4243
Ridge: 1e-6	0.4243
Ridge: 1e-4	0.4243

best performance model

	Random Forest	AdaBoostM1	RBF
Best Parameter Set	NumFeature : 300, numTrees:1, seed:10	Classifier: random forest, numIteration:20, resampling:false,weightThreshold:100	Clustering seed: 1,minStdDev:0.2, numCluster:40, ridge: 1E-8
Minimum training error	0.0441	0.028	0.2368