Report Machine Learning Offline-2:

Ensemble: AdaBoost Implementation

Prepared by: Md. Salman Estyak,

Student No. 1105094

Expected Accuracy of K-cross validation:

NUMBER OF FEATURES: 8

Total data instance: 669

Comparison of accuracies with respect with different boosting round numbers:

K Cross Validation	Number Of Rounds, T	Average Accuracy(%)
5	5	95.45
10	5	95.07
20	5	95.15
Leave-one-out	5	96.55
5	10	95.45
10	10	94.30
20	10	95.93
5	20	95.75
10	20	96.76
20	20	96.25
5	30	95.15
10	30	96.76
20	30	96.093

Comparison of ID3, A single decision stump and AdaBoost classifier (30 rounds) based on accuracy:

K	Decision Stump accuracy (%)	ID3 accuracy (%)	AdaBoost accuracy (%)
5	91.667	95.45	95.303
10	91.076	95.07	96.307
20	91.406	95.78	95.46