CS1675 - Assignment 10

Zachary M. Mattis

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I. Problem 1 - Feature/Input Ranking

a. Fisher_score(x, y)

Rank	Fisher Score	Index
1	0.3192	48
2	0.2140	25
3	0.1910	21
4	0.1892	70
5	0.1693	65
6	0.1673	40
7	0.1650	29
8	0.1402	19
9	0.1255	57
10	0.1212	20
11	0.0995	24
12	0.0950	30
13	0.0858	12
14	0.0846	47
15	0.0607	61
16	0.0579	10
17	0.0527	34
18	0.0462	27
19	0.0461	39
20	0.0422	41

Table 1: Fisher Score, FeatureSelectionData.txt

b. AUROC_score(x, y)

Rank	Fisher Score	Index
1	0.7340	25
2	0.7133	48
3	0.6887	40
4	0.6837	29
5	0.6833	21
6	0.6730	67
7	0.6707	70
8	0.6695	11
9	0.6661	47
10	0.6620	65
11	0.6459	12
12	0.6432	24
13	0.6412	39
14	0.6383	6
15	0.6315	19
16	0.6270	57
17	0.6280	20
18	0.6174	34
19	0.6168	5
20	0.6090	14

Table 2: AUROC Score, FeatureSelectionData.txt

There are a total of 15 shared dimensions between the two result sets. They are not in the same order, but they are relatively close. This is expected as the dimensions that have the greatest predictive power should be very similar across different interpretative algorithms.

II. Problem 2 - Bagging of Classifiers

a. SVM

b. SVM lol