
Assignment 3

Logistic Regression, SVM, Multiclass Logistic Regression.

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Single class Logistic Regression

Training Accuracy	Validation Accuracy	Testing Accuracy
86.162%	85.28%	85.23%

Support Vector Machine

	Training Accuracy	Validation Accuracy	Testing Accuracy
Linear Kernel, Default	97.286%	93.64%	93.78%
Radial Basis, Gamma =1	100%	15.48%	17.14%
Radial Basis, Default	94.294%	94.02%	94.42%
Radial Basis, Default, c = 10	97.132%	96.18%	96.1%
Radial Basis, Default, c = 20	97.952%	96.9%	96.67%
Radial Basis, Default, c = 30	98.372%	97.1%	97.04%
Radial Basis, Default, c = 40	98.706%	97.23%	97.19%
Radial Basis, Default, c = 50	99.002%	97.31%	97.19%
Radial Basis, Default, c = 60	99.196%	97.38%	97.16%
Radial Basis, Default, c = 70	99.34%	97.36%	97.26%
Radial Basis, Default, c = 80	99.438%	97.39%	97.33%
Radial Basis, Default, c = 90	99.542%	97.36%	97.34%
Radial Basis, Default, c = 100	99.612%	97.41%	97.4%

Multiclass Logistic Regression

Training Accuracy	Validation Accuracy	Testing Accuracy
93.39%	92.43%	92.67%

Graph for Radial Basis Kernel with Varying c value.

