

Language used :- Octave (Version 3.8.1)

Packages Used :- Statistics

Optimization

Algorithm Used :- SVM (with Gaussian Kernel)

Logistic Regression (Discriminant analysis)

Deep Neural Network

Steps used by me to reach upto my model on the given training set are :-

1. First i started training my model of logistic regression algorithm with the some percentage of randomly selected training example form the given training dataset and on the same instant checking the accuracy with some new unselected dataset to find the best regularizing parameter lambda to avoid overfitting and underfitting of the model and best threshold value for classifictaion ,so in that way i found accuracy as
training accuracy = 86%
testing accuracy = 82.6%
2. Now in same way I trained my model with Svm algorithm with gaussian kernel and the parameter to be optimized to give best test accuracy are sigma(used in the gaussian kernel) and C for regularization to avoid the underfitting and overfitting the data ,so in that way I found
training accuracy = 82%
testing accuracy = 74%
3. Now I applied Deep Neural Network approach to train in the same way with brute force approach with the regularizing parameter lambda and no of hidden layer and units ,I started this approach in last so due to its high complexity I cud not be able to reach the output within the constrained period .

So after going through these approach i selected the logistic output with more accuracy as the result but infact svm output is also in the folder.