CIS 5526

Project Instructions

In this zip file is this document, my project code consisting of 2 scripts, and the data set I used.

My project should really just unpack and run as long as the data file is in the source directory. The script that the actual project is in is called "project.py". It uses the get data function to create 2 separate sets of training and testing data that are then put through the trainRNN function to train and test the network.

It will also print out a large amount of covariance matrices and correlation coefficients.

It should print out a visualization of the loss using various learning rates.

Then it will then train and test the network in a loop 3 times. It will train and test on the normal data first producing a MSE and a graph of the last 100 examples, the data with my extra features second, and then compare the two in another graph.

Additionally at the end of my program it will print the lists of the MSE for both the normal data and my domain engineered data. So they can be compared. Generally I see that the average of the domain engineered data as lower, but it is not guaranteed to be the case. I find the results for my idea inconclusive.