

DTSC680: Applied Machine Learning

Module 5

Assignment 7

Directions

Complete the Assignment_7.ipynb file; further directions are located in that file.

Below is a simple rubric indicating how you will be graded:

Import, Split, and Standardize Data 10%

Were you able to successfully import, split, and normalize the data into a training and test set? Did you normalize your data after the split instead of before?

Plotting Data 10%

Were you able to properly plot the training data?

Neural Network Construction 40%

Were you able to successfully build and train a neural network on the training data?
Does your model seem to fit the data well based on your plotted model predictions?

Plot Model Predictions for Training Set 30%

Were you able to successfully visualize the model's predictions for the training data?
Does your prediction curve seem to fit your data well?

Compute Generalization Error 10%

Were you able to successfully compute the generalization error for the testing data? You should be able to tell if your generalization error might be too high based on the fit of your prediction curve.