

Machine Learning Midterm project

This is a large project meant to exercise your creativity. On canvas you will find 9 directories with data files and data descriptions. Comb through them and choose one of interest. **Then make an appointment with me to discuss what you intend to do with the data set.** Once you get the go-ahead build a data matrix that you can train using Multivariate polynomial regression.

Once you find the degree of polynomial and training size. You can write a program that takes as input the features you selected and outputs the value you are predicting. This program should give me a description of the inputs and output (someone that has no idea what it is doing should be able to understand the inputs and outputs).

You must also submit a 2 to 3 page paper describing the data, why you chose your features, and why you rejected and accepted the fits that you explored. Graphics are a must as well as pros. You must have the standard form

1. Introduction
2. Body
3. Conclusion

What is turned in:

Cleaned data file used to train your model

Code that trains the model (10pts)

Code that showcases the model (10 pts)

Paper outlining the project (10 its)