

Nolan Arenz

CSC 2280

Project Proposal: Regression

For my project I would like to design a program where the user can input two or three sets of data and have the program run a multiple regression analysis of the data and produce a graph of it. I'd like for the program to be able to handle large data sets upwards of 500 per input. As an economics major, we regularly run regressions to look for correlations between sets of data as to be able to predict future occurrences in the data sets. Excel is also very clunky on my computer and I would like to have a more efficient way of performing regression analysis. My priorities will be as follows:

- High Priority
 - Programming the mathematical functions to calculate a single regression
 - Have it open a graphics window that graphs the function
- Medium Priority
 - Program to allow for multiple regression analysis
- Low Priority
 - Program an Anova Analysis as well

This program would require the Graphics and Math libraries, and the data would be time series that is user input but I would test it by using data from FRED (Federal Reserve Economic Data). I'd like to set up the output graph to be a line graph to illustrate changes over time.