

Name:
Banner ID:

ME 6543: Machine Learning & Data Analytics

Homework 1

Programming Assignment

You have been provided with a data file in Blackboard named "**Toy_Dataset.csv**". Please, use the dataset and try to perform the following operations

1. Import Data File (25%)
2. Estimate the Regression Co-efficient (25%)
3. Calculate the Confidence and Prediction intervals for "Intercept" and "Slop" (25%)
4. Plotting the data, regression Line, CI and PI (Use, $\alpha = 0.025$) (25%)

Bonus (5%): Plot residuals and Probability plot of Residuals

Submission:

Please submit your assignment through Blackboard. Submit either your "jupyter notebook" file or your core python file (.py). If you have any questions please let us know through email.

Note:

Please, don't use any pre-build packages to perform the following. Build your own functions as shown in the class to complete the homework.