Fall 2017 - STAT 518 – Project -- Part II Real Data Analysis: Parametric vs. Nonparametric

The goal of this assignment is to analyze some real data set using both a nonparametric approach and a parametric approach. The data set and research question should be of the type that could be analyzed using the methods we have studied in STAT 518. You should already have gotten data approved by me from your Part 1.

For this final part, you should describe in a typed report:

- (1) the individuals in your sample
- (2) the variable or variables measured on the individuals

(3) the research question you will answer, including the null and research (alternative) hypotheses
(4) statistical analyses of the data using two approaches for answering the research question (one should be nonparametric and one should be a classical parametric approach)

(5) your specific conclusions about the research question based on your data analysis. Be sure to interpret your results in the context of your real data set.

(6) Your conclusions about which approach (nonparametric or parametric) seems preferable, based on the characteristics of your data, as evidenced by your Q-Q plot(s), and why.

This part is due by Friday, December 8, 2017, but you can turn it in early.

Grading:

The project will be graded out of 30 points, of which this final part is worth 20 points. As an encouragement for working in groups, you will get 2 bonus points if you work in a group of two people. When working in groups, each member must contribute significantly to the project.