Group 4 Team Project Proposal

Group 4 Members: Eddie Kuang, Riley Hawley, Jince Shi, Eric Tashji

Problem Statement:

Republican voters tend to reside more in rural areas, whereas Democrat voters tend to reside more in urban areas. Republicans want to increase its turnout in urban areas by 5% and Democrats want to increase its turnout in rural areas by 5%.

Data Set:

There will be two data sets: one for voters in rural areas and one for voters in urban areas. The data will include each individual's age, gender, marital status, number of children, occupation, salary, standard of living, party membership, rate of voter turnout, most important issue (when polled), engagement with Democrat or Republican ground campaign, and percentage of votes for Democrat or Republican candidates for the past 8 years.

Implementation Plan/Timeline:

- 1. Develop the dataset or find one from a repository. (~1 week)
- 2. Use Models to notice trends among urban and rural voters. (~1 week)
- 3. Determine factors to increase voting in urban and rural areas. (~1.5 weeks)
- 4. Determine actions needed to increase voting in urban and rural areas by 5%. (~1.5 weeks)

Task Allocation:

Eddie Kuang and Riley Hawley: Develop the dataset.

Model Allocation:

- Eddie Kuang: K-means
- Riley Hawley: Logistic Regression
- Jince Shi: Linear Regression
- Eric Tashji: Decision Tree

Eric Tashji and Jince Shi: Analyze the data to determine what actions will increase voter turnout by 5%.