Predicting the Midterm Election

Problem statement

Midterm elections, like the ones last November, often swing the power of our politcal parties and can provide a marker for how a president is performing. Historically, the president's party loses seats: on average 27 seats in the House of Representatives ($t = 5.09, p < 0.0001$) and 3.8 seats in the Senate ($t = 3.21, p = 0.0044$) (data). This significant change could be due to voter fatigue, a reaction by the public to the President's actions, or simply a form of 'regression to the mean'. Essentially, the political direction of the country often flips or flops based on the result of the midterms.

Project goal: The primary goal of this project is to explain the outcomes of the 2018 midterm elections in the House: , Any piece of information from before election day can be used to perform this analysis, but the suggested feature set should include past elections, polling data, and demographic information of congressional districts (see below).

For an example analysis of the 2018 election, see this Washington Post article.

Data Recources

1. **Election Results**
   There are a few sources of recent election results: Harvard's Data Verse, FEC's 2016 Report, and Archived Election Results since 1982

2. **Congressional District Data**
   Demographic data on Congressional districts can be found on Census.gov, and geospatial data are found on Data.gov.

High-level project goals

1. Obtain publically available data from various public sources (some scraping will definitely be required).

2. Build a predictive model for the midterm election in November, 2018 from data before election day

3. Use the 2018 results to determine why and when the predictive model was right or wrong.

4. Build a statistical model to determine what factors or characteristics in the election districts led to the biggest swings in the results from past elections.

References

1. Campbell, J., et al. (2015). *Evaluations of the 2014 Midterm Election Forecasts*. PS: Political Science & Politics, 48(2), 295-300.

2. Cohen, Jeffrey E., et al. (1991). *The Impact of Presidential Campaigning on Midterm U.S. Senate Elections*. The American Political Science Review, 85(1), 165âĂŞ178.

3. Erikson, R.S. (1988). *The Puzzle of Midterm Loss*. The Journal of Politics, 50(4), 1011-1029.

4. What went wrong with the 2016 election