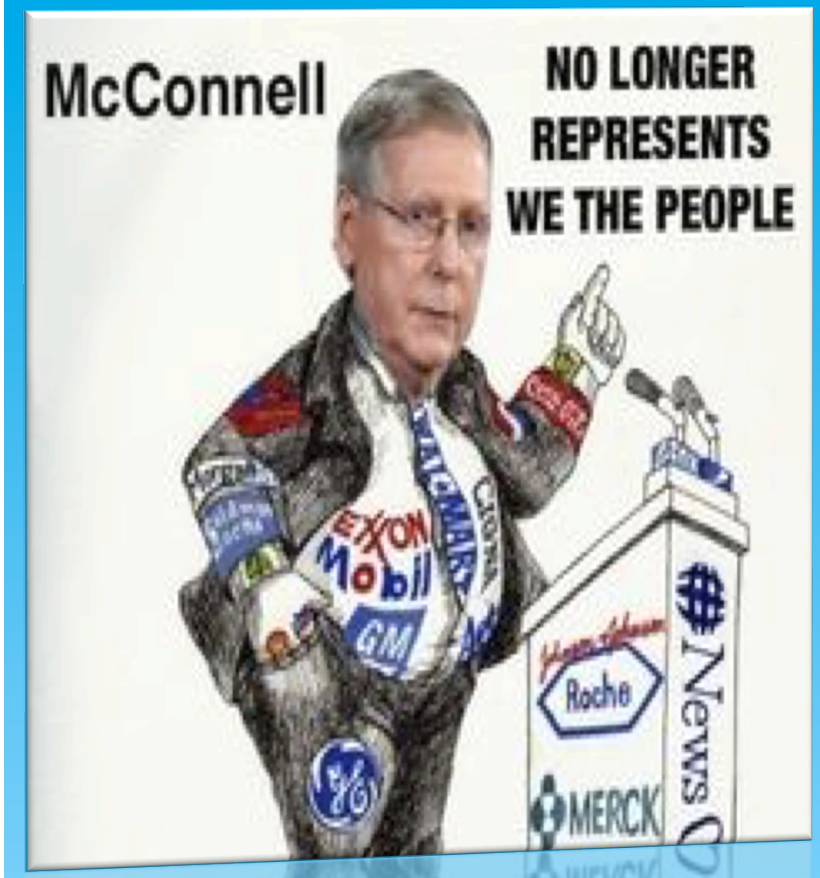
Money in Politics: The relationship between contributions and congressional voting

By: Alex Hubbard



Project Overview:

Publications:

Pigs at the Trough: How Corporate Greed and Political Corruption Are Undermining

- Arianna Huffington

Who Wants to Buy a Politician?

– NYT

Research Question:

What is the true relationship between campaign contributions and voting results?

Can politicians be bought?

Data Set

GUN CONTROL	GUN RIGHTS	MISC DEFENSE	OIL & GAS	...	not voting	opensecrets_id	party	state	subjects_top_terms	total	vote_score	yea	yea_percent	yea_total
0	0	0	1750	...	0	N00000010	R	IN	Armed forces and national security	1	1	1	1	1
0	0	0	2550	...	0	N00000010	R	IN	Armed forces and national security	2	2	1	1	2

Collection:

- All bill from the 101st to the 114th congress - 1989 to present (subset for project, Armed Forces and Nation Security) (api: govtrack.us)
- How each official voted on a bill (api: govtrack.us)
- Contributions to each political official since 1981 (bulk export)
  - https://sunlightlabs.github.io/datacommons/bulk_data.html
- Not using all variables for this analysis. Plan to continue working with this data set.

Cleaning

Cleaned:

- A lot of cleaning was necessary
  - Bill id was used to find voting information
  - Voting information found officials from government id
  - Government id was used to find campaign id
  - Campaign id was used to find campaign contributions
  - Campaign funding industries were condense from 400+ to 115
  - Rolling tally of money collected, and voting history
- Cleaning:
  - Choose new contribution industries as features
  - Rolling tally (script finished after presentation was made)
  - ???

Exploration and Beyond

Exploration:

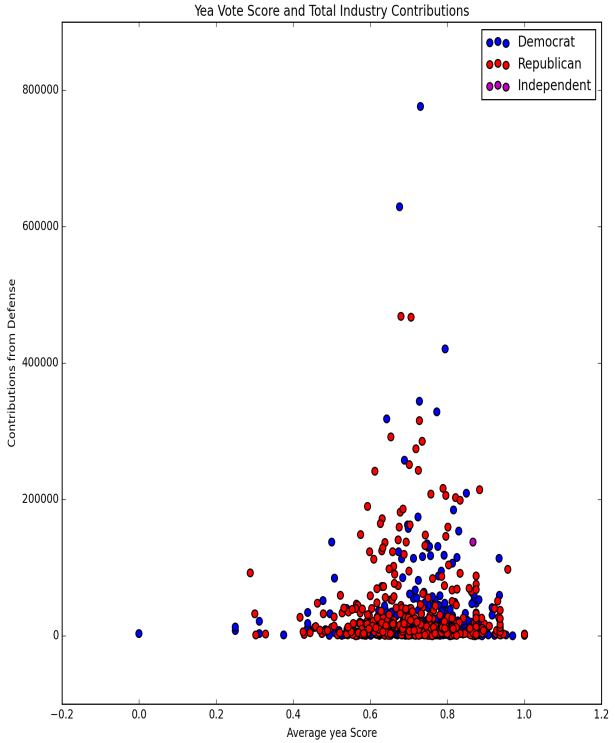
- Initial:
  - Used groupby function to get holistic view
  - Not provide much detail because aggregated analysis
- Future:
  - Analysis on rolling tally of data

Enough data?

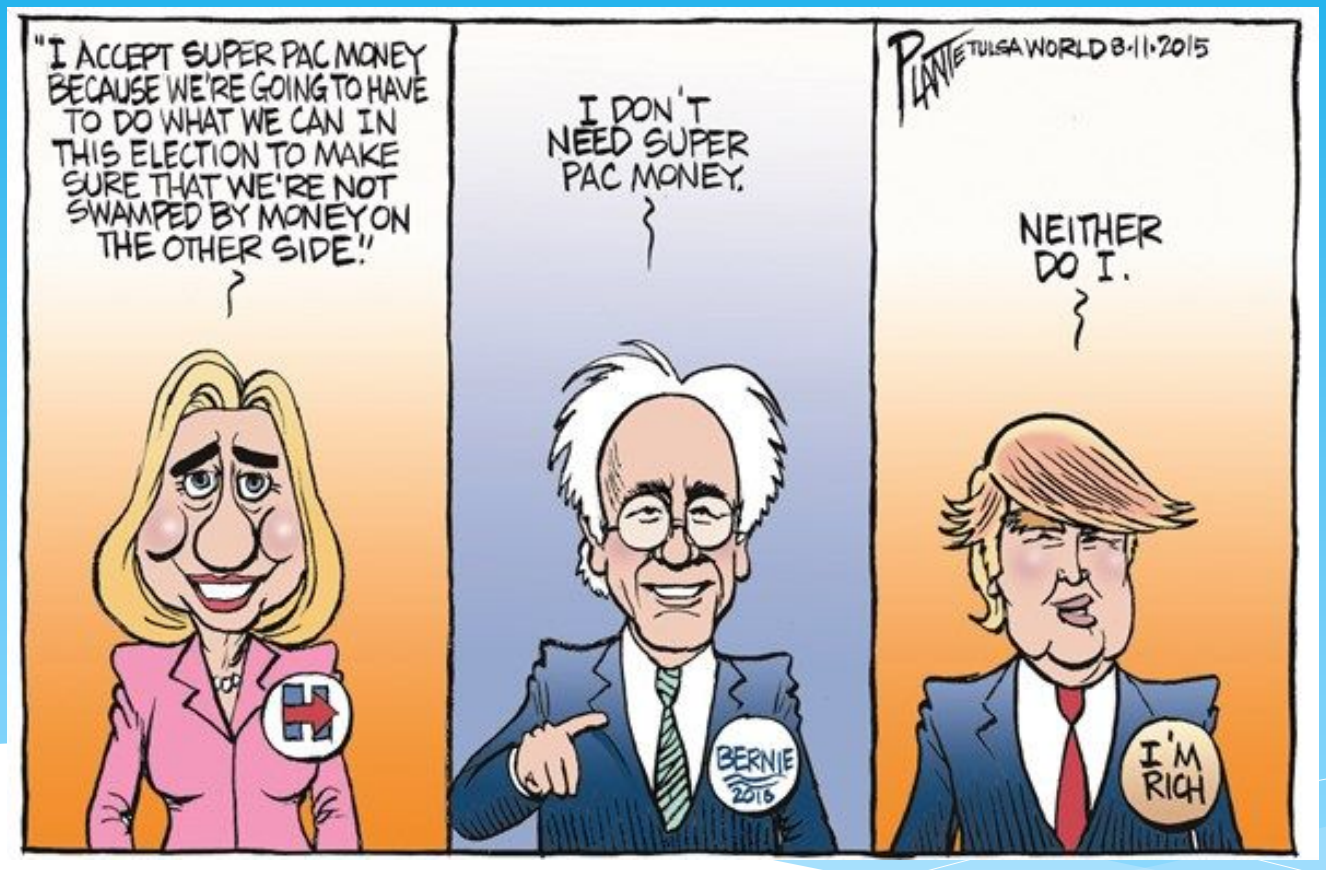
- Yes, more than enough

Modeling:

- Explore Baysian because of the probability
- Explore clustering to find groups
- Random Forest



Question?


"I ACCEPT SUPER PAC MONEY BECAUSE WE'RE GOING TO HAVE TO DO WHAT WE CAN IN THIS ELECTION TO MAKE SURE THAT WE'RE NOT SWAMPED BY MONEY ON THE OTHER SIDE."
I DON'T NEED SUPER PAC MONEY.
PLANTE TULSA WORLD 8-11-2015
NEITHER DO I.
BERNIE 2016
I'M RICH