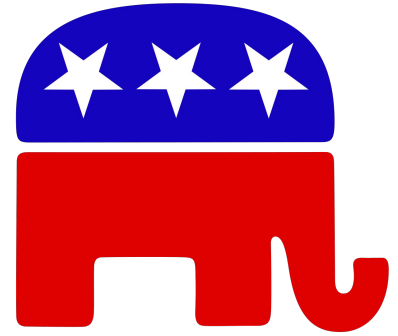


Yet Another US Election Vis

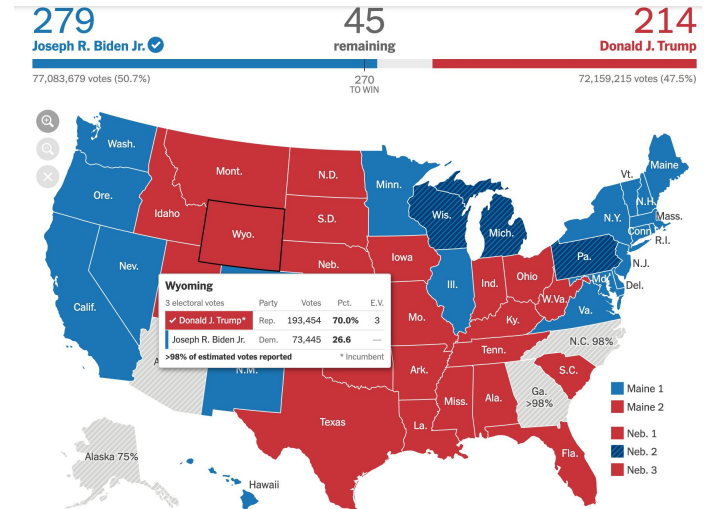
Group 3

Junran Yang
Guangan Chen
Dang Mai



Topic

- U.S. Election Visualization
 - Election results
 - One party wins
- Dynamic (Shift) rather than Static (Results)



Topic

Trend ?

Shift of Voting?

Parties?



Correlation ?

GDP growth, GPD value?

Dataset

MIT Election Data Science Lab : U.S. Election data from 1976-2016

$\text{election_shift_rate} = \text{dem_last_year_percent} - \text{dem_start_year_percent}$

$\text{avg_total_vote_years} = \text{average}(\text{total vote of each selected year})$

US States GDP at market prices : U.S. States GDP from 1976 to 2016

$\text{gdp_growth_rate} = (\text{state_last_year_gdp_value} - \text{state_start_year_gdp_value}) / \text{state_start_year_gdp_value}$

Work distribution

Teamwork

Topic discussion; data encoding

Junran Yang

Mockup; Data Collection; Control Pane; Map Visualization

Guangan Chen

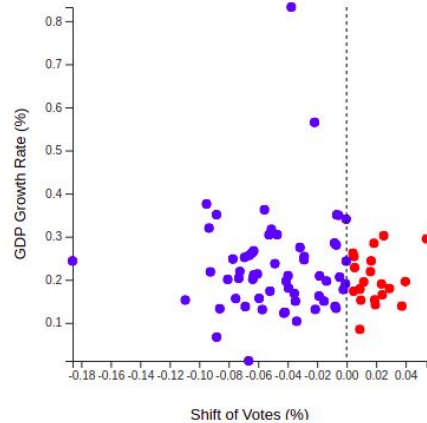
Data Collection; Map Visualization

Dang Mai

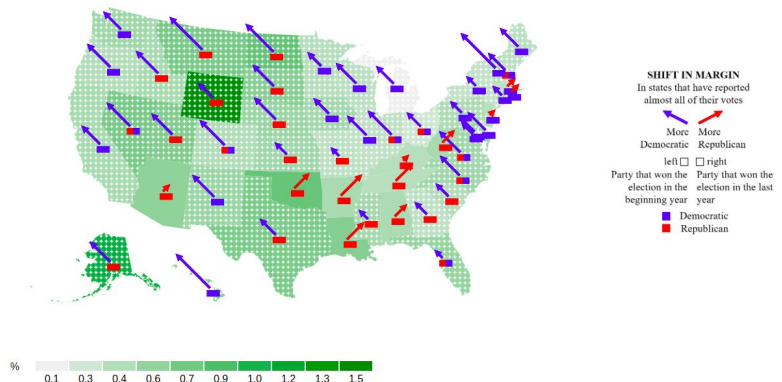
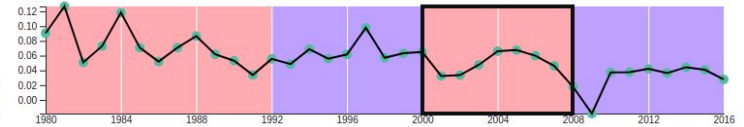
Auxiliary Visualization

Difficulties

- Finding appropriate visualization
- Aggregate the shift of voting and GDP data
- Decision of normalization



Symbol Data
Shift of Votes
Regional Data
GDP Growth Rate GDP Value



Tool Interface

- Control Pane
 - Data Option
 - Year Selection
 - Selected States
- Map Visualization
 - Choropleth
 - Arrow Glyph
 - Auto Selection
- Auxiliary Visualization
 - Individual and Summary Line Chart
 - Scatterplot

User Tasks and Interesting Findings

- How does the election periods change? And GDP data? (Control Pane)
- Are some states always for Democrats or Republicans? (Individual Line Chart)
- How does the economy of states that shift towards Republicans (or Democrats) perform? (Summary Line Chart)
- What is the correlation between GDP values and shift of votes? (Map and Summary Line Chart)
- What is the correlation between GDP growth rates and shift of votes? (Map and Summary Line Chart)
- How votes shift between each periods? (Control Pane and Map)
- How much would a party win over another? (Summary Line Chart)