

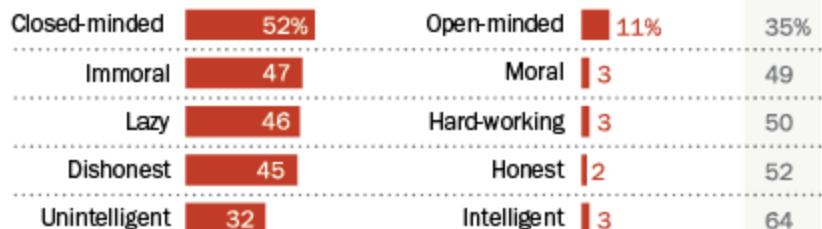
Unifying a Nation: A Data Science Solution

By Marcos Dominguez, Data Scientist

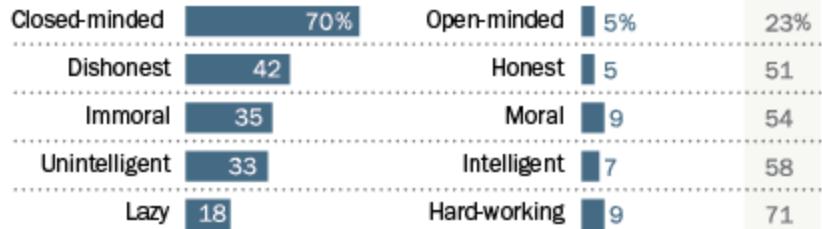
Nation remains divided

2016

% of Republicans who say Democrats are more ___ than other Americans



% of Democrats who say Republicans are more ___ than other Americans



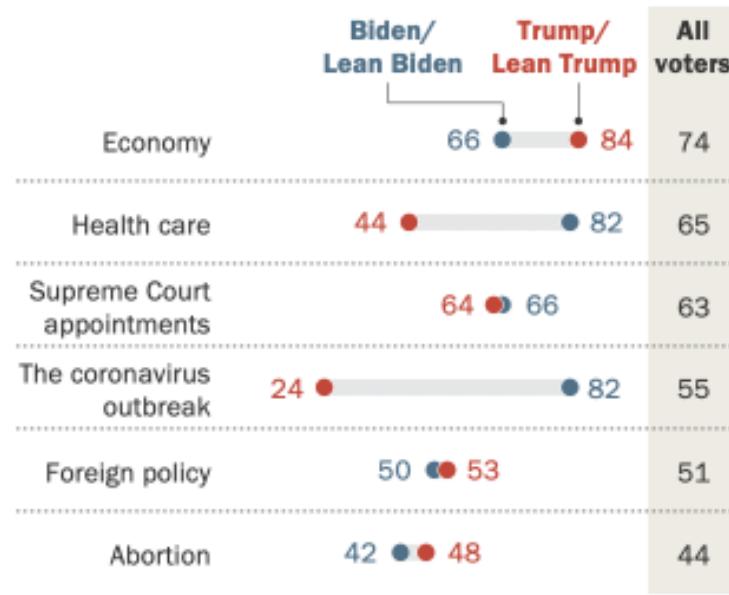
Note: Don't know/No answer not shown.

Source: Survey conducted March 2-28 and April 5-May 2, 2016.

PEW RESEARCH CENTER

2020

% registered voters who say each is ‘very important’ to their vote in the 2020 presidential election



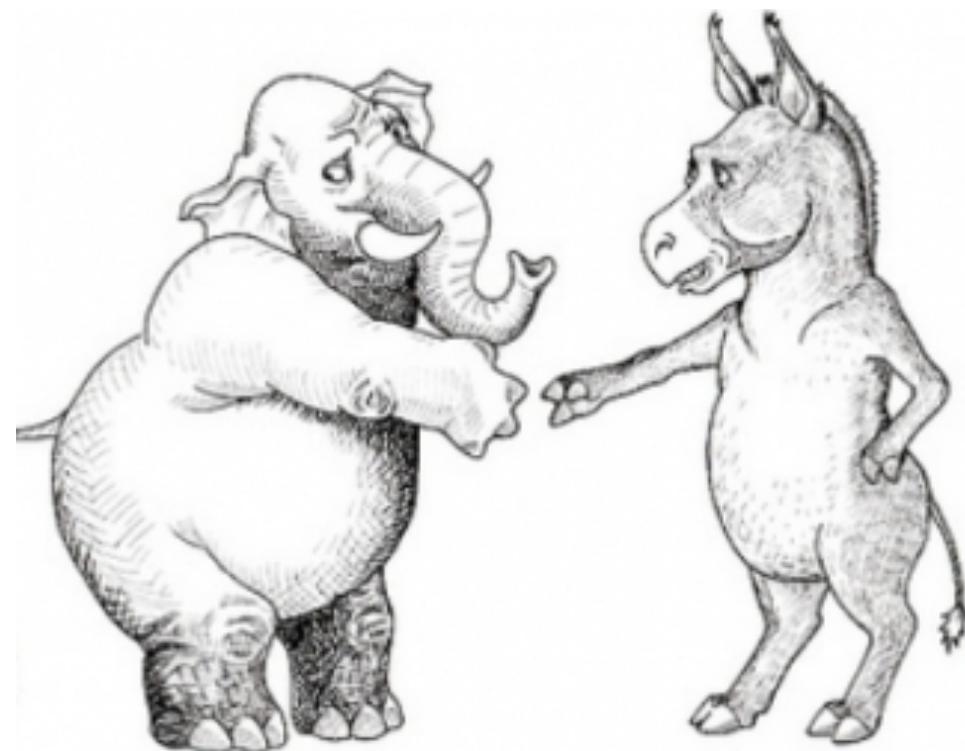
Note: Based on registered voters.

Source: Survey of U.S. adults conducted Oct. 6-12, 2020.

PEW RESEARCH CENTER

Tailor Biden's speeches to appeal to opposition

- Natural Language Processing
- Extract Topics (Topic Modeling)
- Tailor President-elect Biden's speeches
- Make allies, not enemies



NLP in a nutshell

Trump speech
text

Clean,
decipher and
analyze text

Topic 1

Topic 2

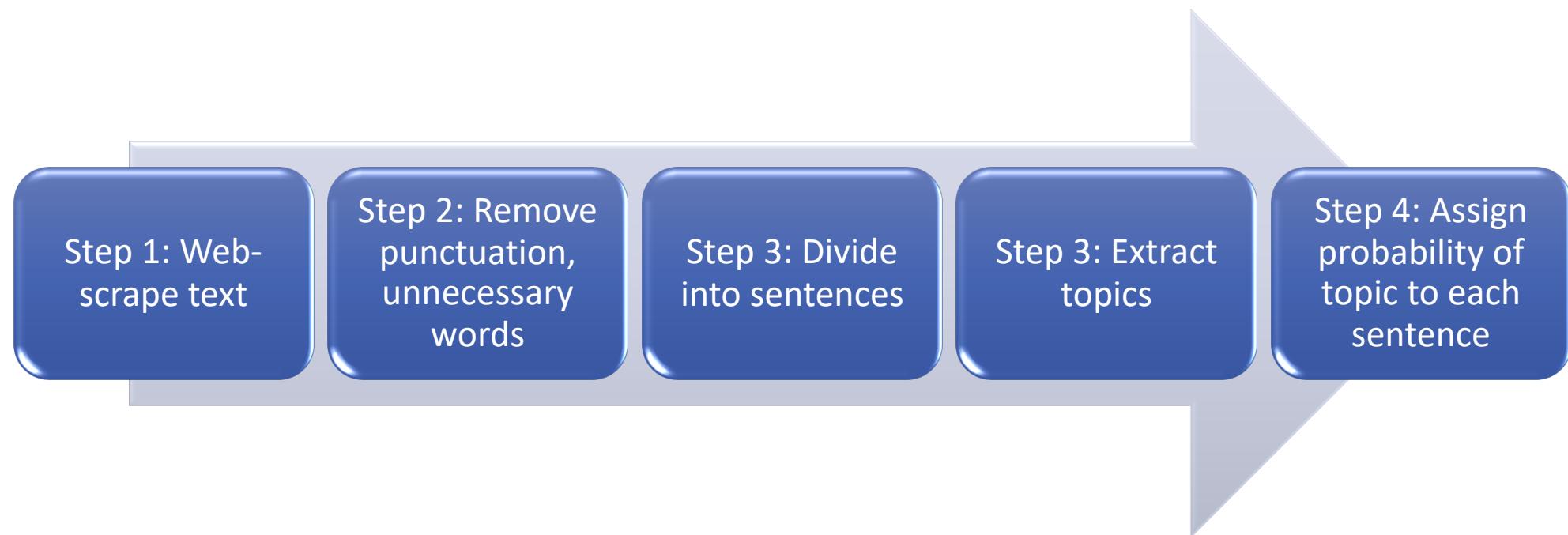
Topic 3

Implementation of NLP

- 8 Speeches in October 2020
 - Arizona
 - Nebraska
 - Wisconsin
 - Michigan
- Analyzed for topic modeling



NLP Steps



Overall Topics

Number of Related Sentences



President-elect recommended talking points

State	Topics	Talking Points
Arizona	Conservative Values, Law & Order	“open-carry” gun laws AND common-sense gun reform
Michigan	Economy, COVID, Conservative Values	“open-carry” gun laws AND common-sense gun reform
Nebraska	Law & Order, Economy, COVID	COVID safety AND rebuilding economy
Wisconsin	COVID, Border	COVID safety AND rebuilding economy

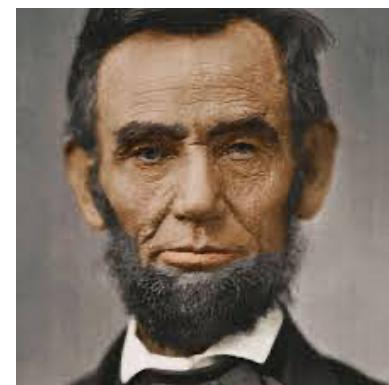
Future work: research speeches of previous crisis-era presidents



Great Recession



Great Depression/WWII



Civil War

Acknowledgments

- Open-source:
 - Python
 - Pandas, Numpy
 - Scikit-learn
 - spaCy
 - Plotly
- [Pew Research, 2016 Poll](#)
- [Pew Research, 2020 Poll](#)
- [Trump Speech Transcripts](#)
- Github repo:
 - [github.com/mdominguez2010/Trump-Speech-NLP](#)