

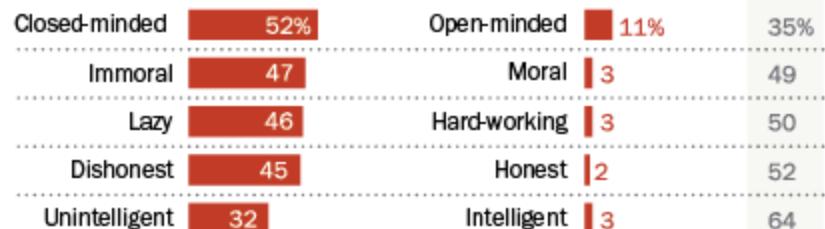
Unifying a Nation: A Data Science Solution

By Marcos Dominguez, Data Scientist

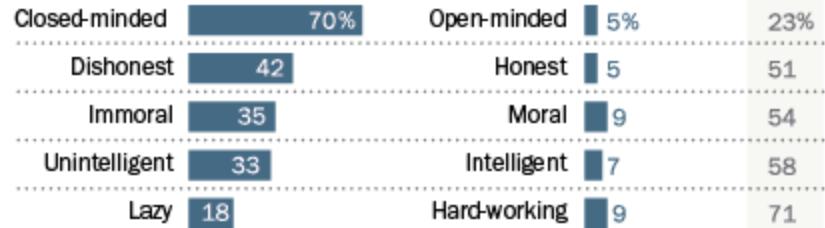
The battle has just begun

2016

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



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



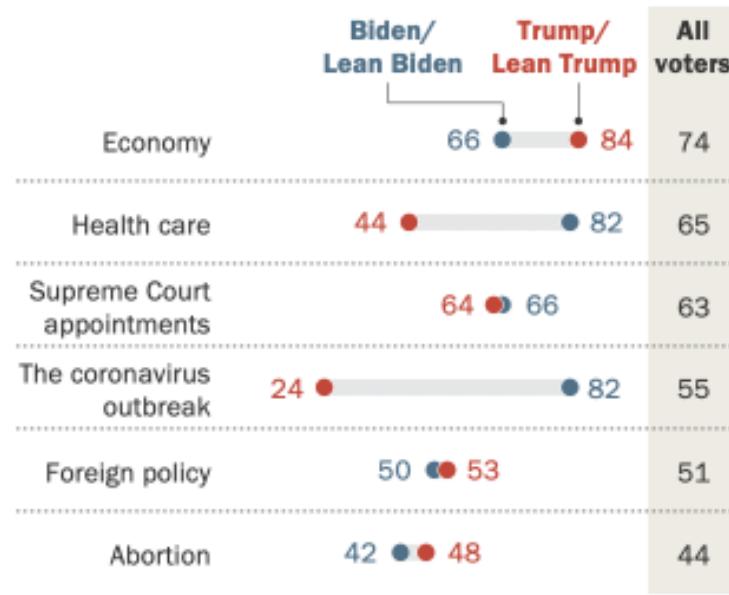
Note: Don't know/No answer not shown.

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

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2020

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



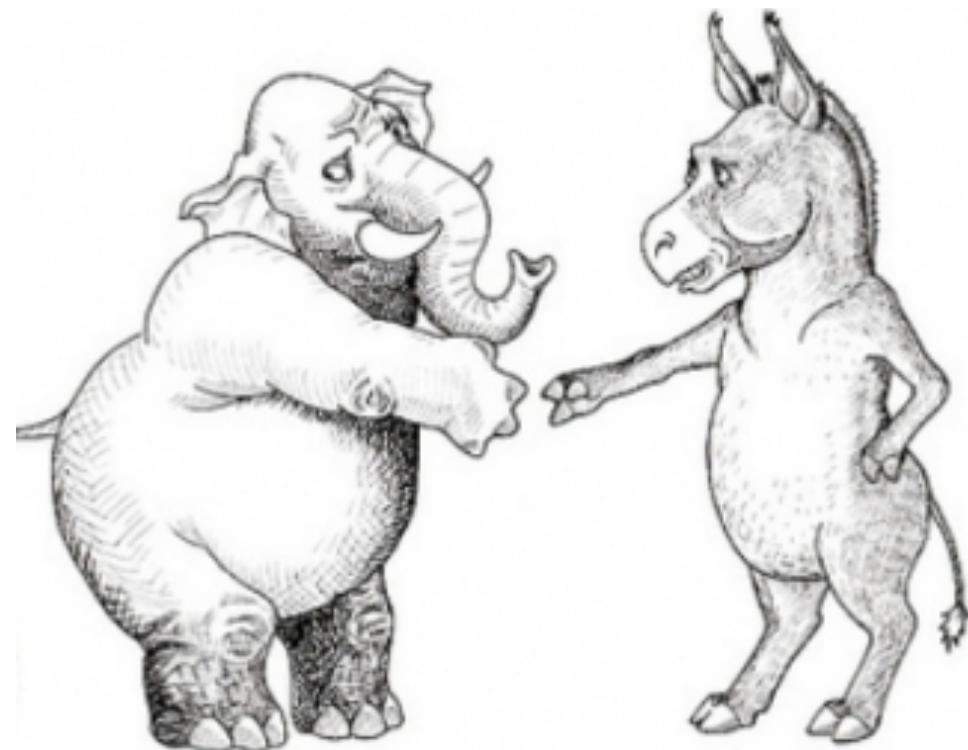
Note: Based on registered voters.

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

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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

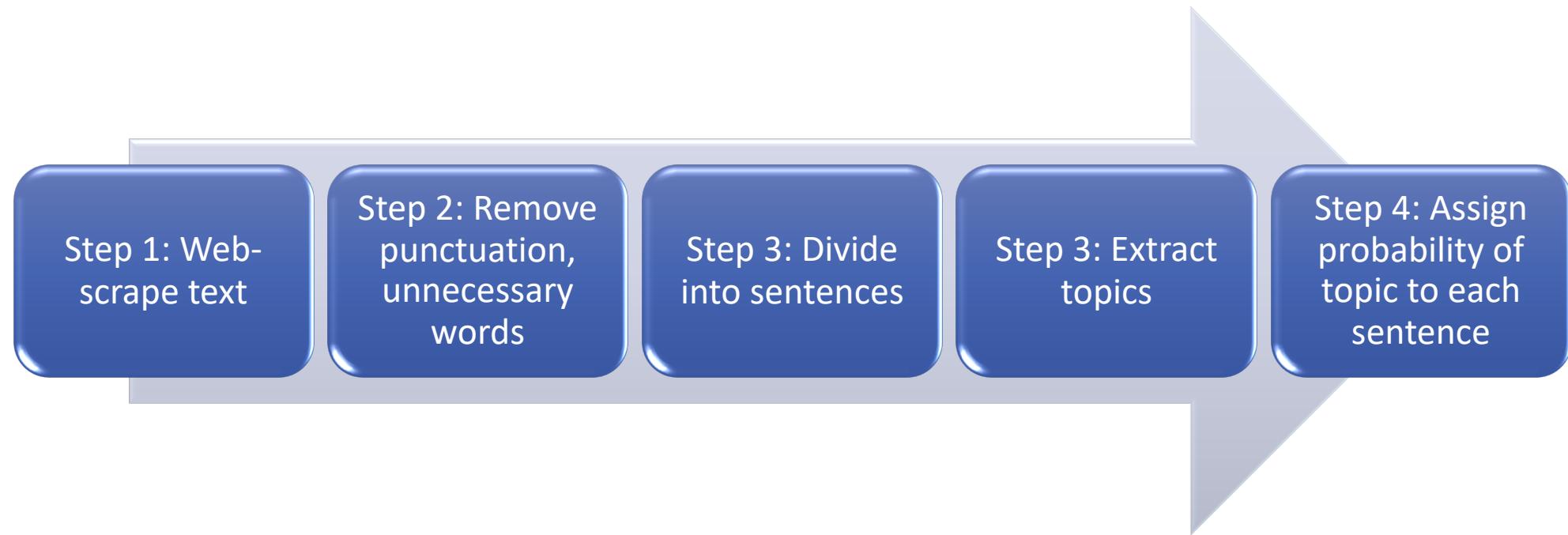
Topic 3

Implementation of NLP

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



NLP Steps



Overall Topics

Number of Related Sentences

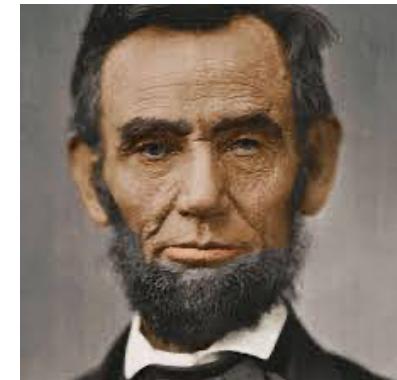
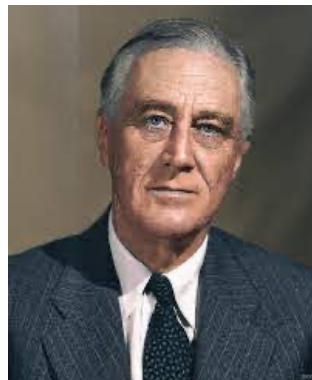


State Talking Points

State	Topics	Talking Points
Arizona	Conservative Values, Law & Order	“open-carry” gun laws, law enforcement
Nebraska	Law & Order, Economy, COVID	COVID plan, law enforcement, Jobs/taxes
Wisconsin	COVID, Border	COVID plan, immigration reform
Michigan	Economy, COVID, Conservative Values	“open-carry” gun laws, jobs/taxes, COVID plan

Future Work

- Previous crisis-time presidents
 - Obama (Great Recession)
 - Franklin D. Roosevelt (Great Depression/World War II)
 - Abraham Lincoln (Civil War)
- Speech methods used to unite the nation during trying times



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](#)