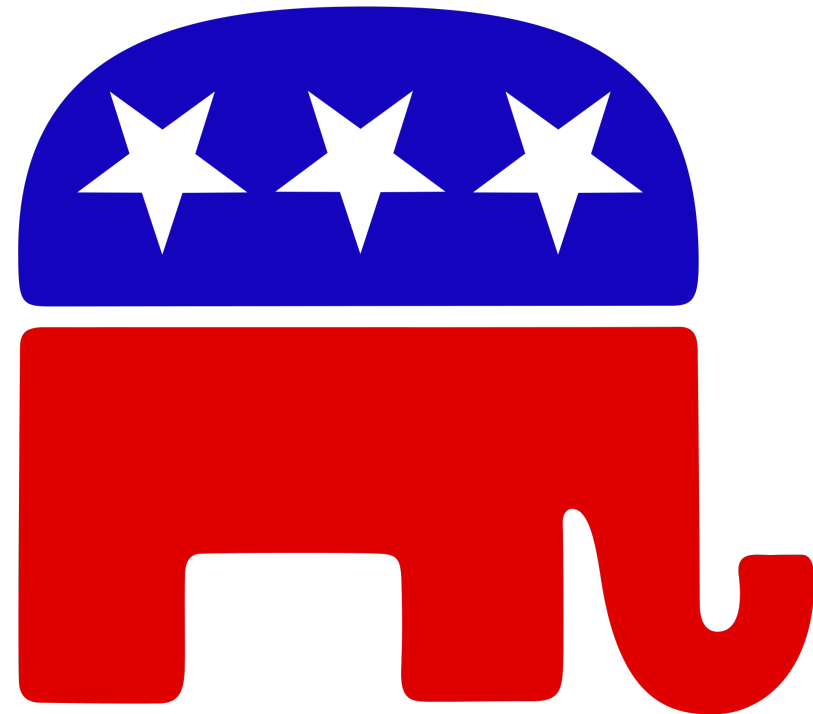Kevin Kesicki.1
Matt Kujawinski.2
Erik Thiem.3

Partisan Speech Analysis

What can we learn about political parties from their candidate's speeches?

Data

- 2 parties

- 3 elections

- 36 candidates

- 1,015 speeches

- 145,417 sentences

Naive Bayes

- TODO: Matt

Perceptron

- Python

- SciPy and NumPy data structures

- NLTK word tokenizing

Perceptron Results

Iterations	Accuracy	Time
1	0.637	1m59.430s
5	0.643	3m9.371s
10	0.652	4m40.839s
20	0.649	7m24.509s
50		

Perceptron Weights

- Top 10 Democratic words:

  hillaryclinton.com : 44.0
  bullying : 42.0
  richardson : 40.0
  michelle : 39.0
  ideological : 38.0
  partnering : 38.0
  blows : 36.0
  detection : 36.0
  intending : 36.0
  nurses : 35.0

Perceptron Weights

- Top 10 Republican words:

  entitlement : -47.0
  conservatives : -40.0
  marshal : -39.0
  entitlements : -39.0
  enterprises : -39.0
  rancor : -38.0
  statehood : -38.0
  unborn : -37.0
  socialized : -36.0
  l. : -36.0

N-Gram

- TODO: Kevin

Questions?