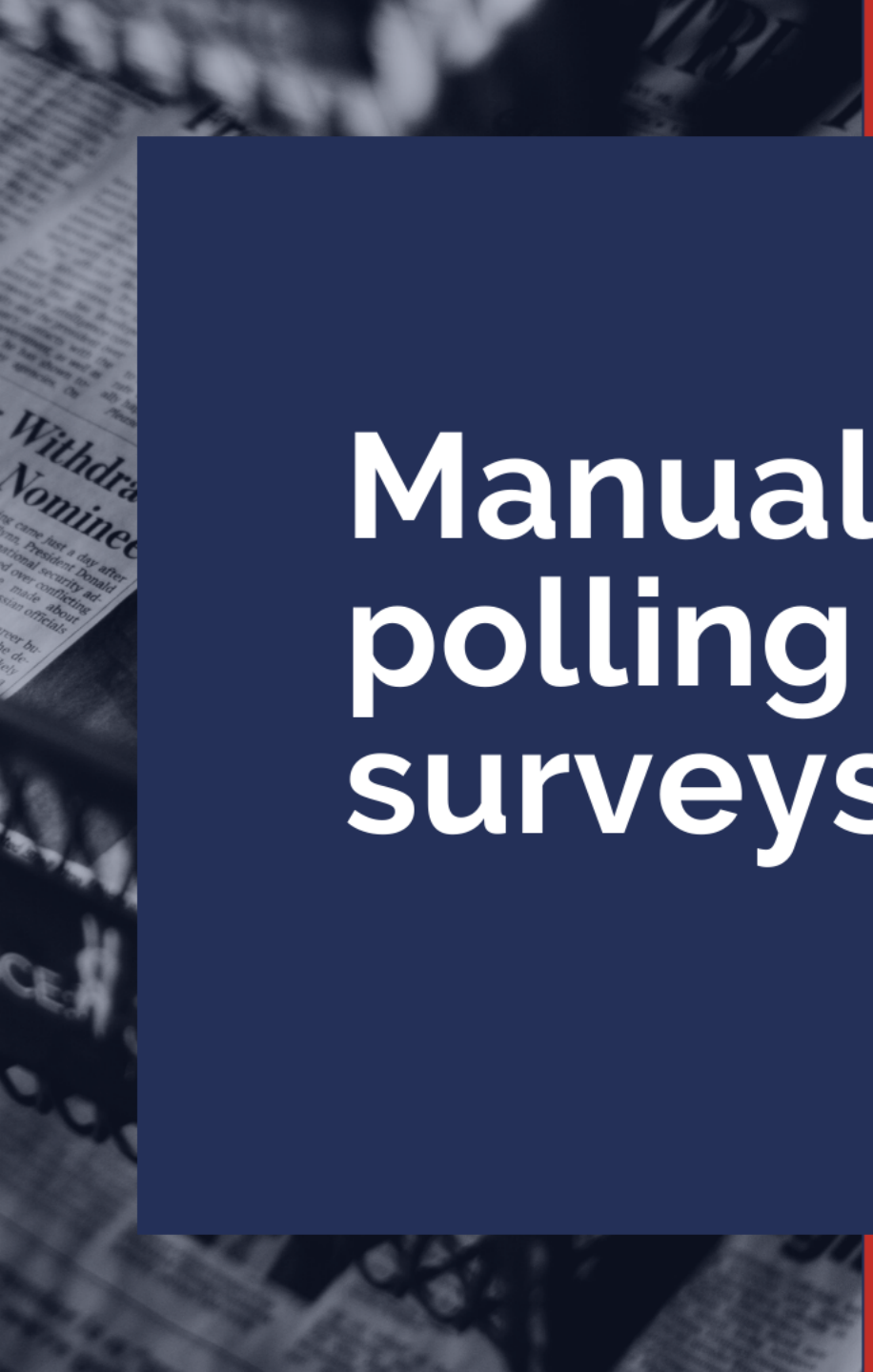
In The News: Predicting Winning Political Candidates From News Tone

LT 13 | Basak, Chua, Danao, Roberto

Can outcomes of elections be predicted ahead of time by news coverage?



Manual polling & surveys

- delayed
- costly
- biased

Trump vs Clinton

A sentiment analysis on Twitter mentions

Sentiment analysis

social media monitoring

API constraints

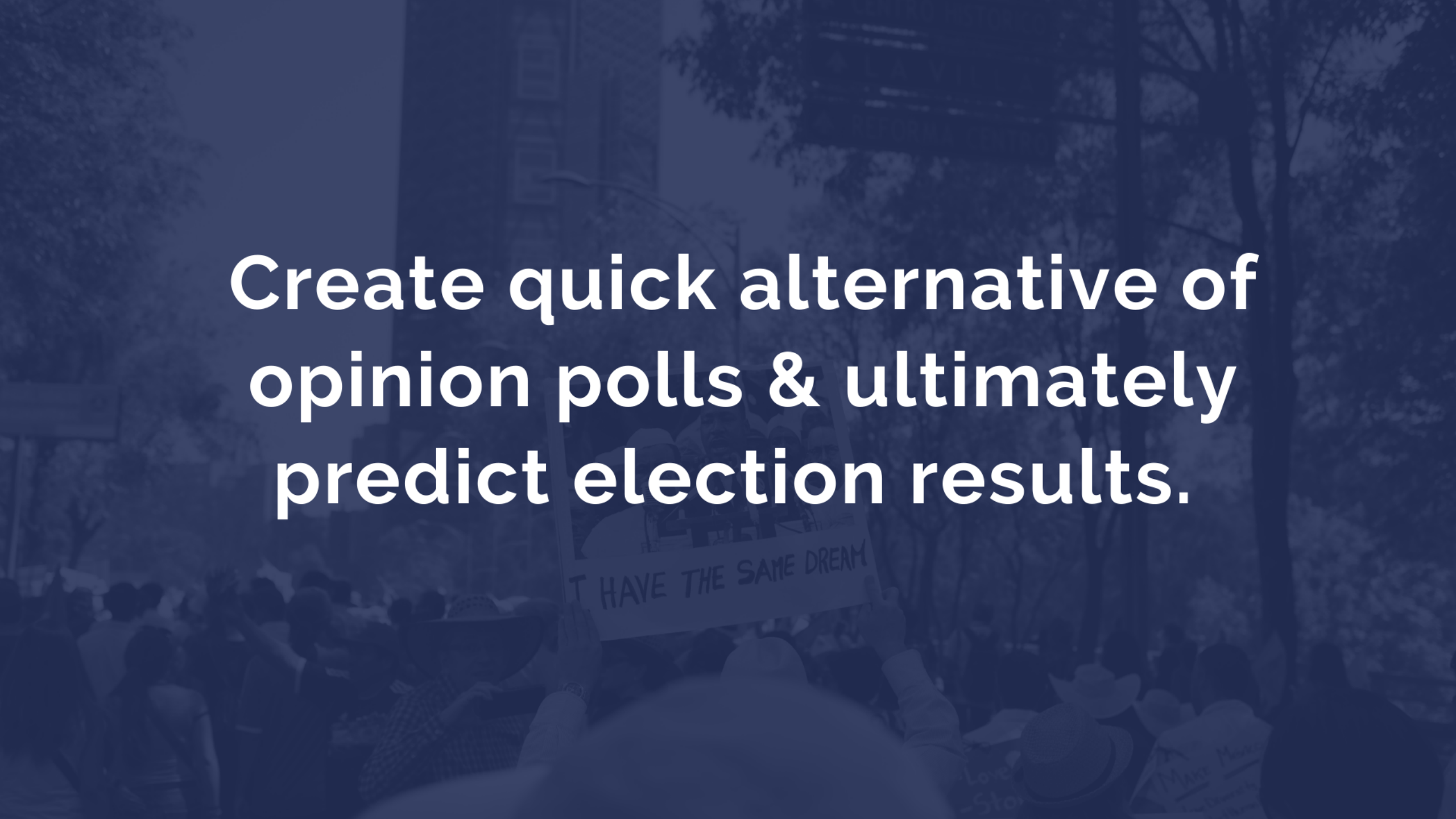
bias & coverage

data privacy

price

Sentiment analysis

social media monitoring



Create quick alternative of opinion polls & ultimately predict election results.

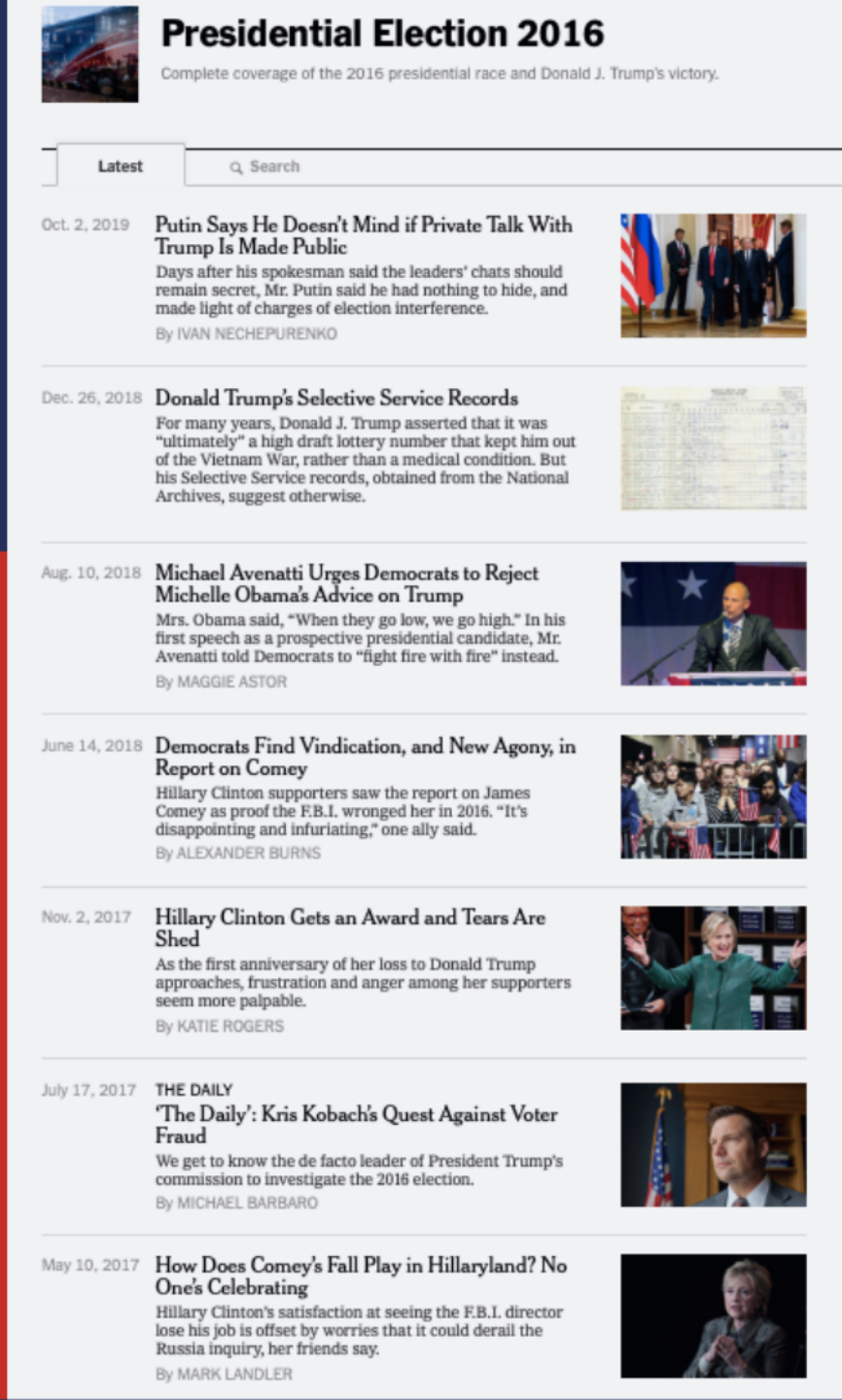
GDELT dataset

Global Database of Events, Language & Tone

102.9 GB

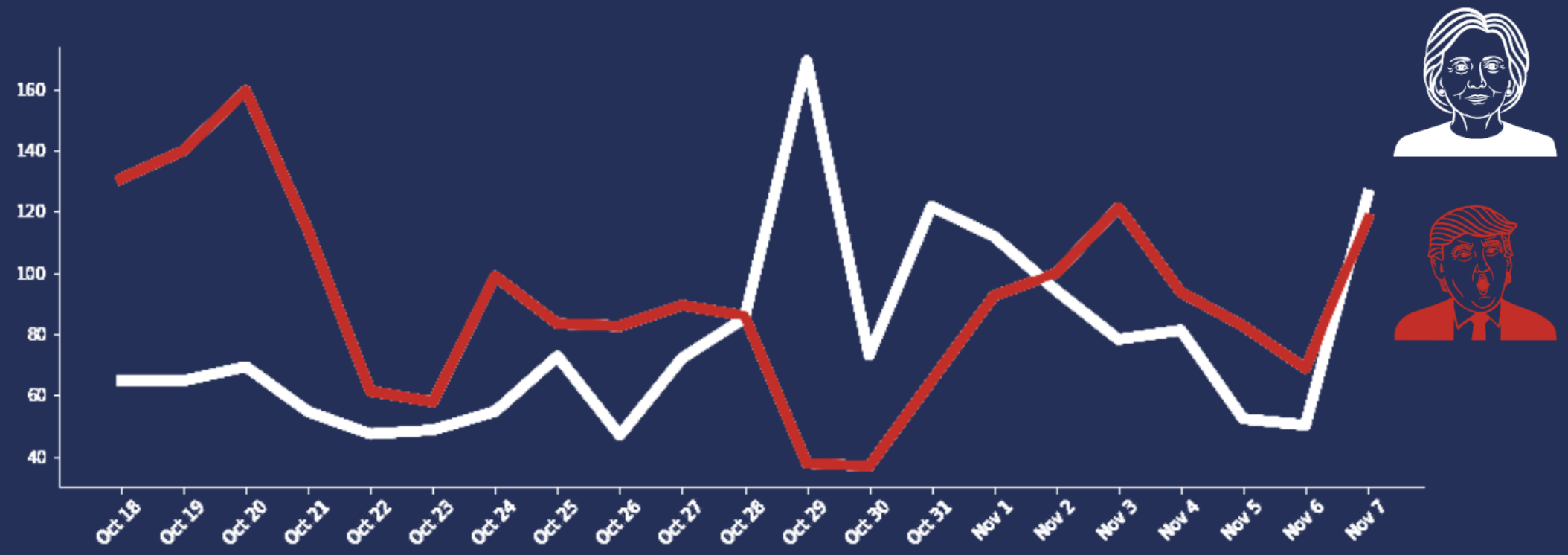
383 million rows

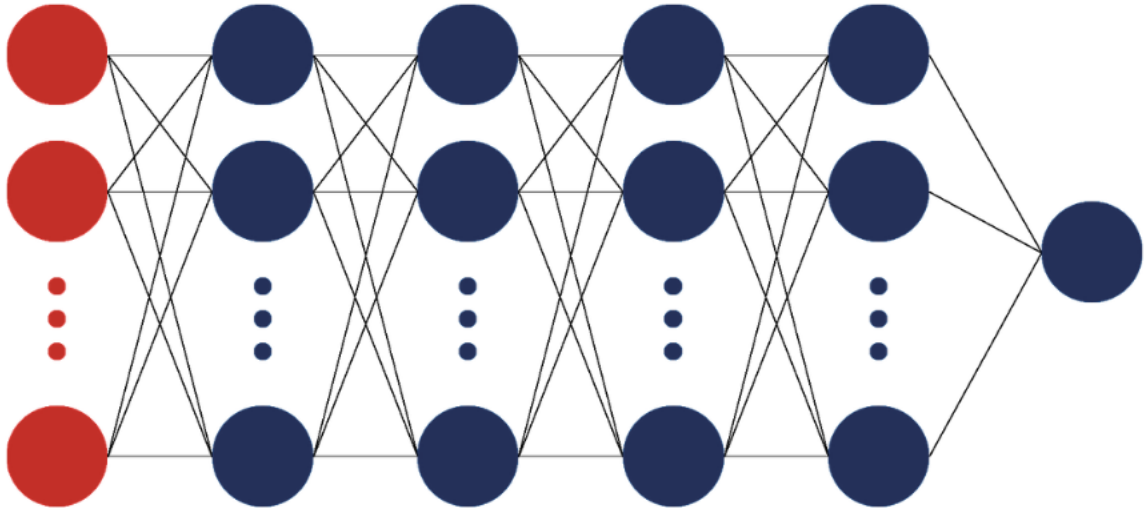
updated every 15 mins



Wrangling big data

21-day chunks &
200 opinion polls





21 hidden nodes

2,332 parameters

Deep learning model

Predictive regression

Results

R^2	97.1
MAE	2.5 ppt

*averaged over 100 trials

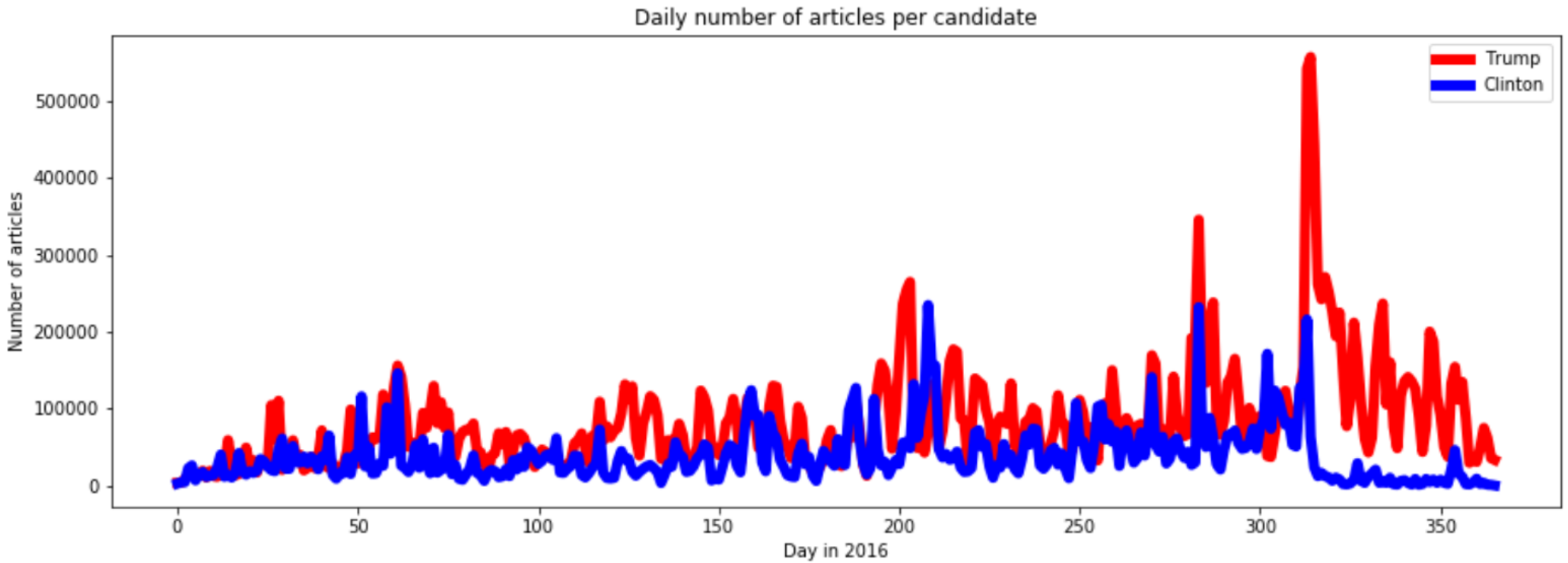
	Election	**Model**
	48.18%	**42.11%**
	46.09%	**41.78%**
	3.28%	**5.83%**
	1.07%	**4.19%**

Results

Actual

No. of articles

Successfully predicts winner by **popularity**



Conclusion

- API constraints
- data privacy
- bias & coverage
- price
- convenience

Conclusion

Data may not be necessarily representative of an **absolute truth**, but it is the next best thing we have to an **objective reality**.