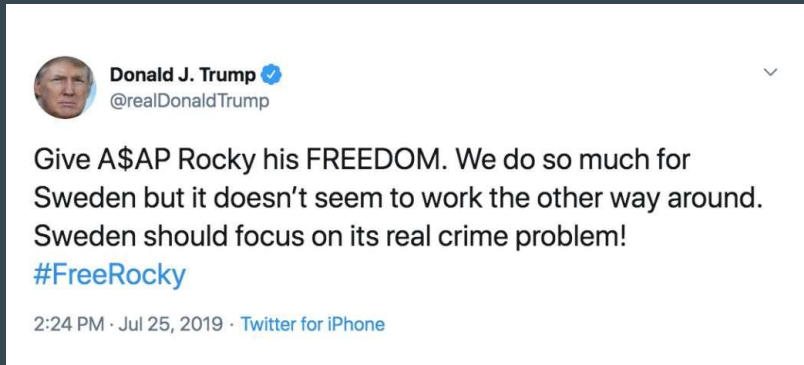# An Analysis of Donald J. Trump's Tweets using NLP
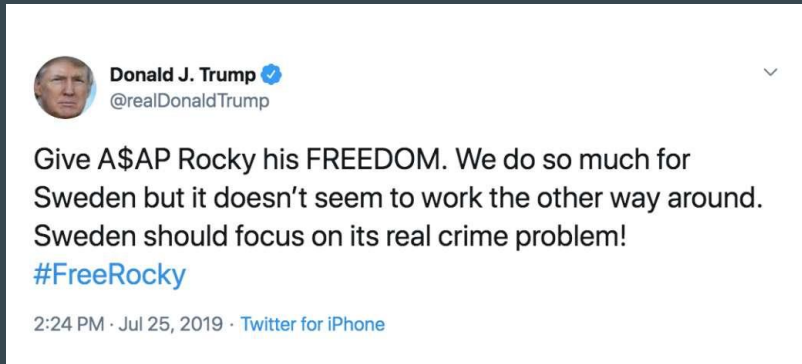
• • •

Lewis Sears
Fall 2020

Background

- By 2016, Trump's tweets generated on average 10,000 likes and 5,000 retweets
- Perhaps his most powerful political tool
- Vowed to give up twitter when he was elected in 2016
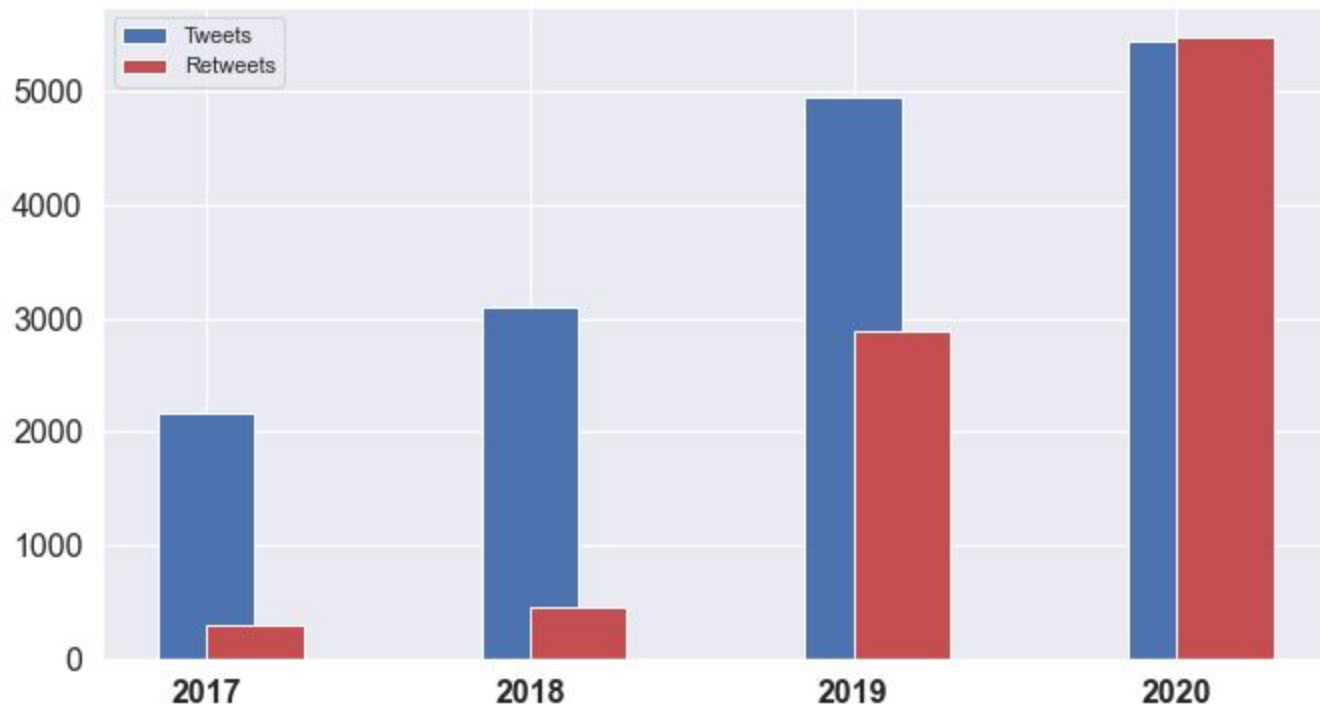- Tweeted 24,758 times since inauguration

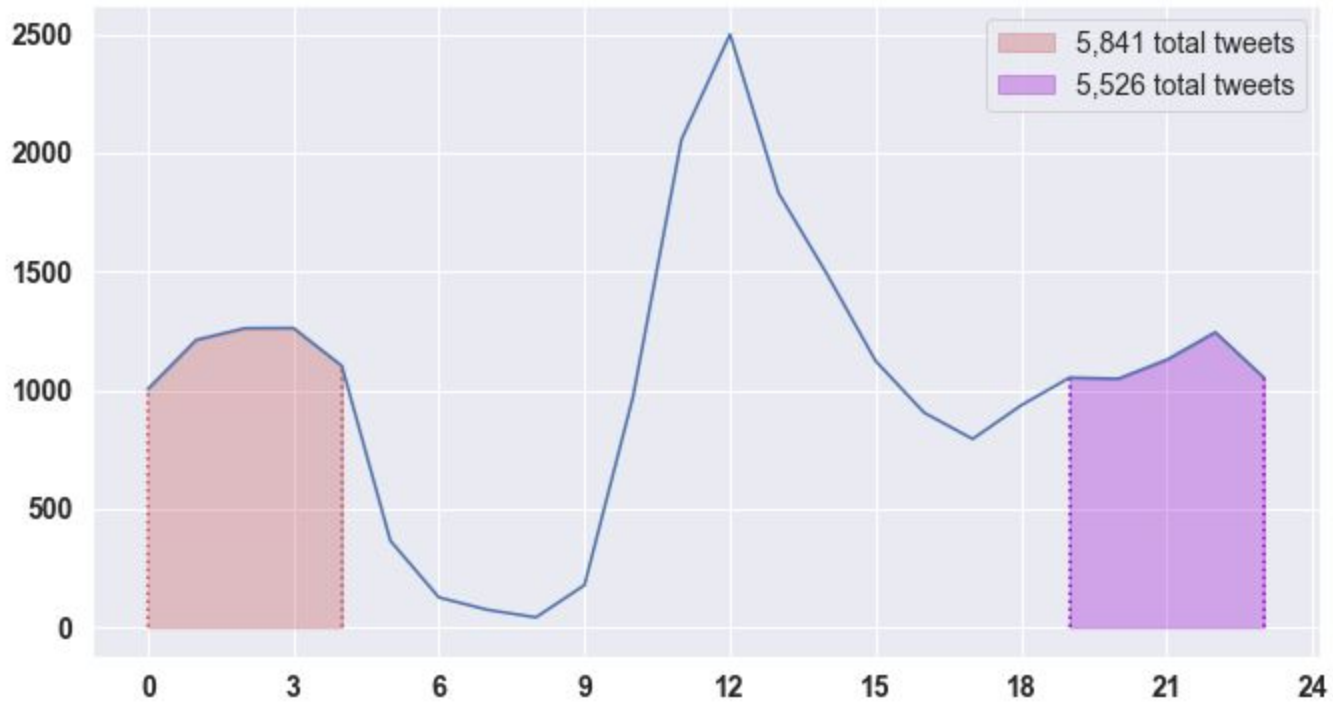**Donald J. Trump** @realDonaldTrump — Following

My use of social media is not Presidential - it's MODERN DAY PRESIDENTIAL. Make America Great Again!

6:41 PM - 1 Jul 2017

55,150 Retweets 193,472 Likes

76K   55K   193K

Donald J. Trump @realDonaldTrump — Follow

MAKE AMERICA GREAT AGAIN!

5:44 AM - 23 Nov 2017

Donald J. Trump @realDonaldTrump

Give A$AP Rocky his FREEDOM. We do so much for Sweden but it doesn't seem to work the other way around. Sweden should focus on its real crime problem! #FreeRocky

2:24 PM · Jul 25, 2019 · Twitter for iPhone

Project Outline

- Analyze tweets while in office
- Cluster word choices
- Word2Vec word associations
- Time series trends
- Sentiment analysis

Donald J. Trump ✔
@realDonaldTrump
Following

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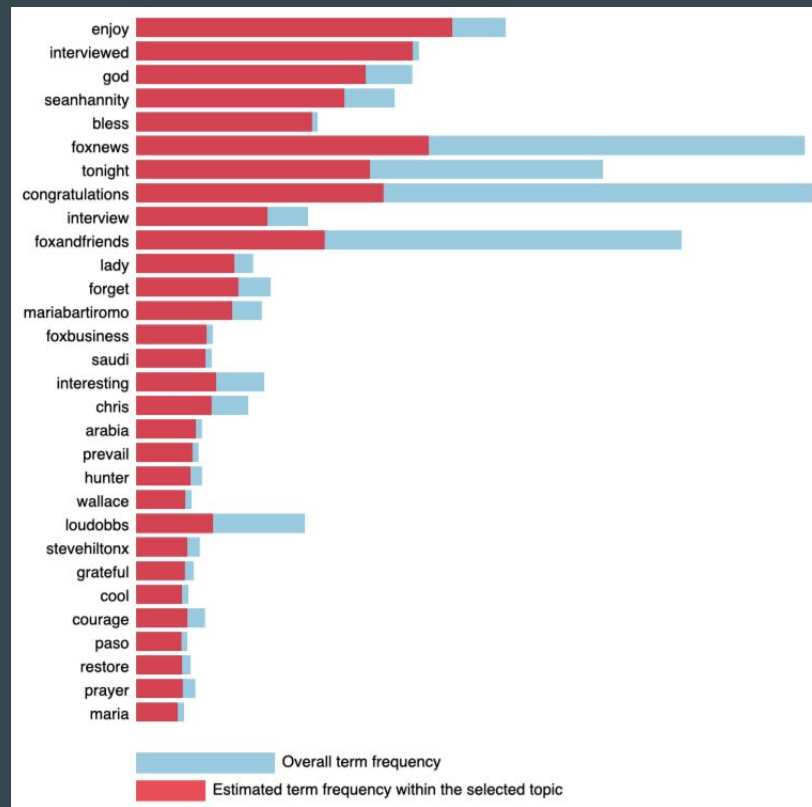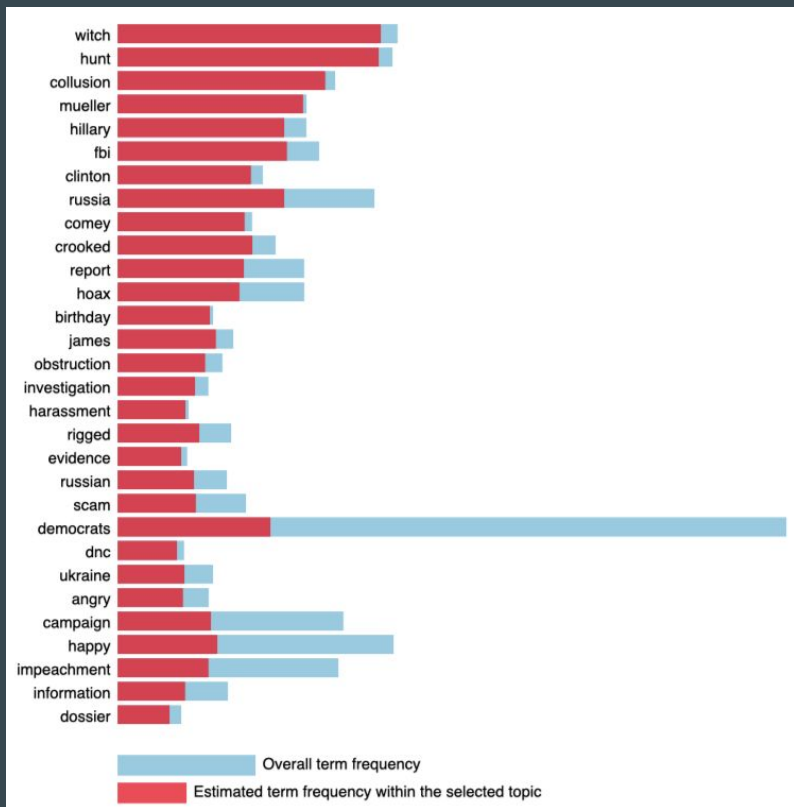2:24 PM · Jul 25, 2019 · Twitter for iPhone

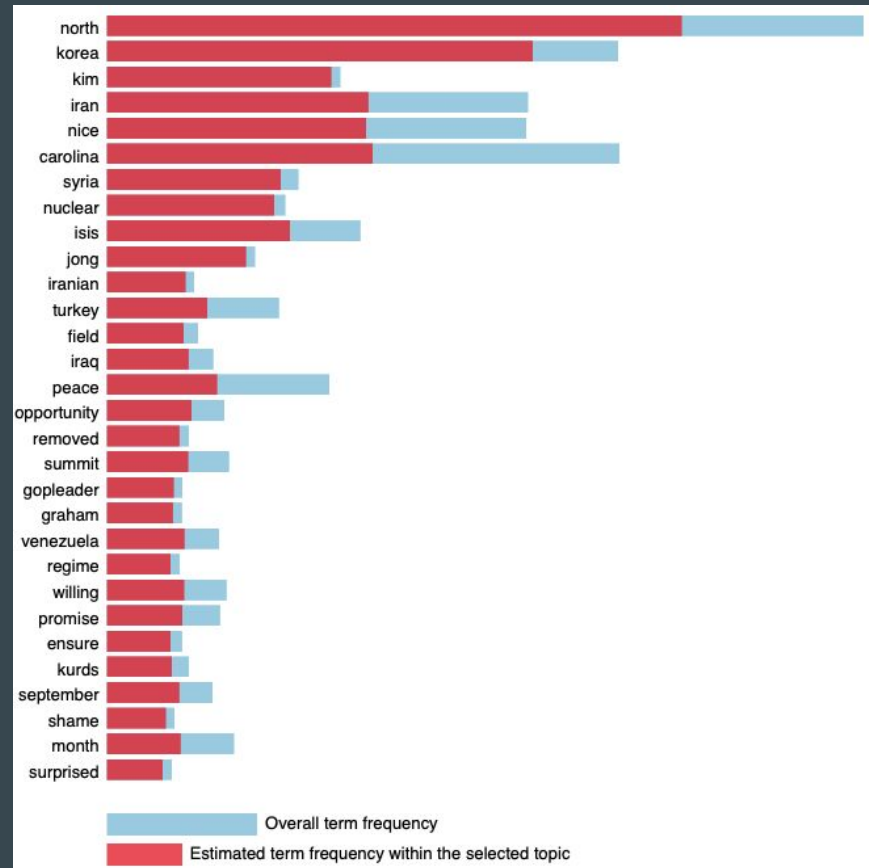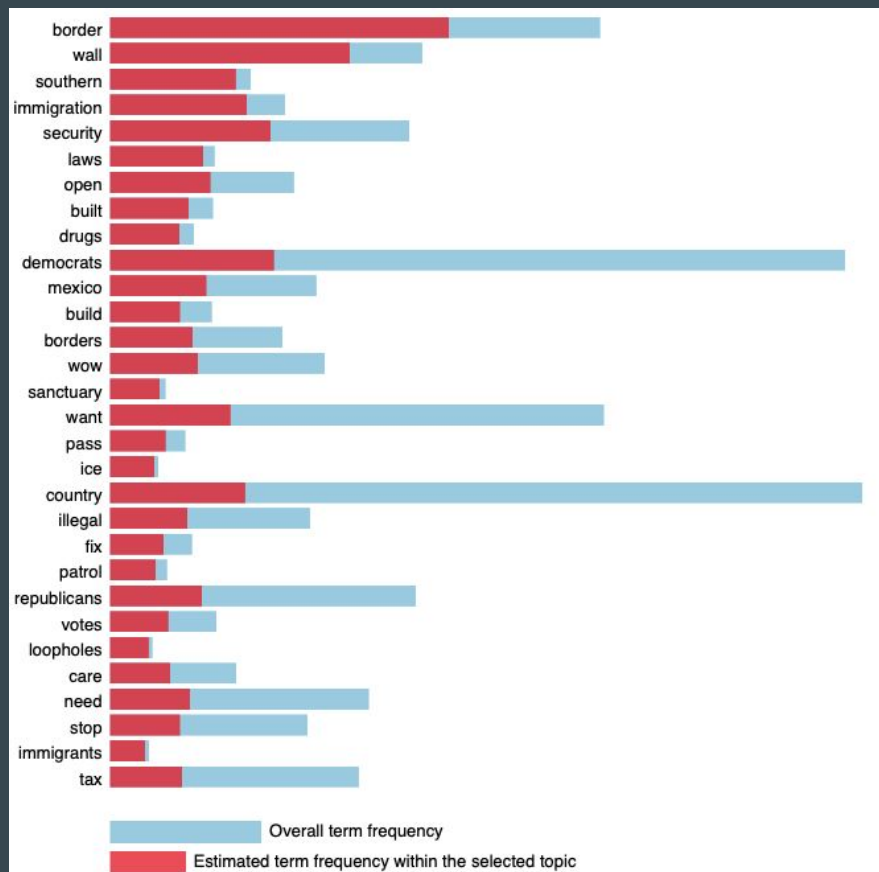# Trump Tweets by Year

Total Tweets by Hour

The Language

...

Domestic Tweets with LDA

Foreign Policy with LDA

Word2Vec Word Association

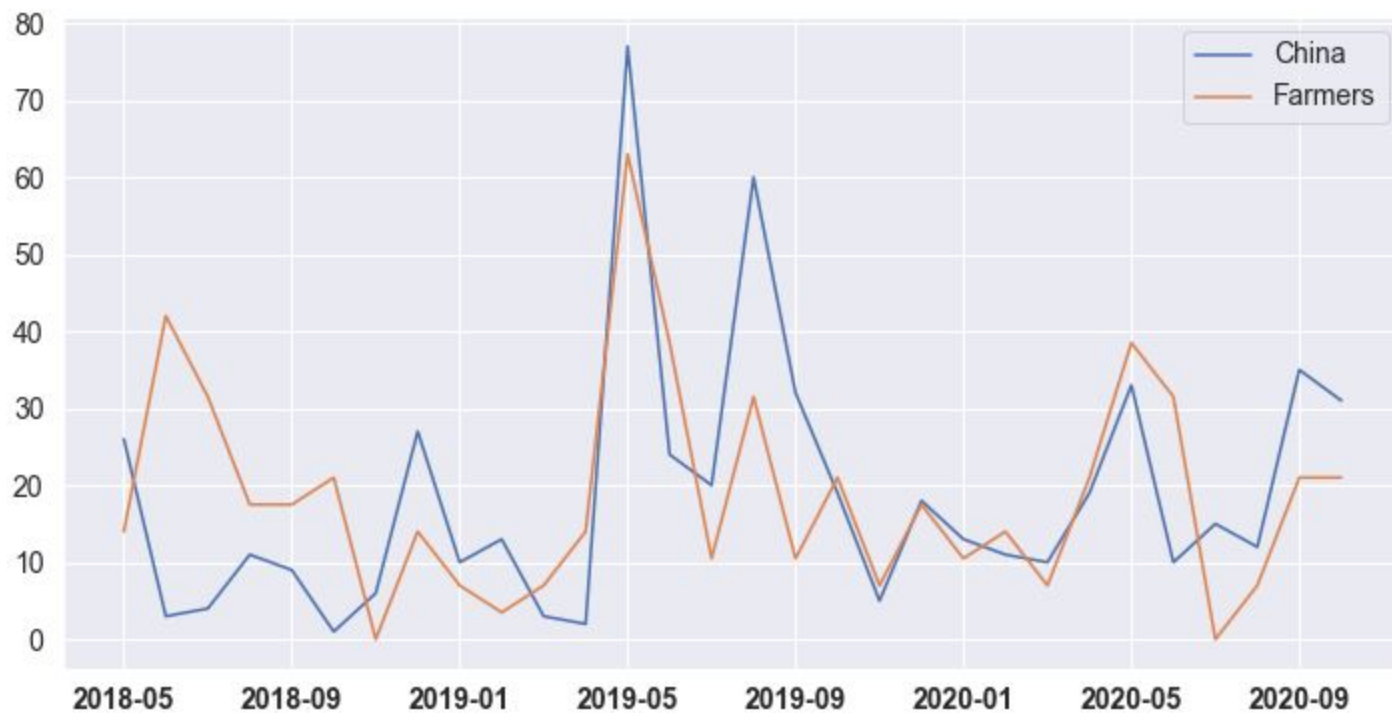| biden	fake	immigrants	socialists	mob	china	russia	aoc	drugs	antifa	left
sleepy	lamestream	lottery	extremist	hypocrites	europe	russian	squad	trafficking	looters	radical
joe	media	chain	mobs	card	virus	russians	controlled	gangs	mobs	islamic
scarborough	dishonest	illegals	arsonists	squad	chinese	probe	mob	criminals	ruined	wing
hunter	nbc	traffickers	abandon	oppose	trade	colluded	congresswomen	human	agitators	congresswomen
bernie	nytimes	drugs	departments	sudden	negotiations	blaming	maxine	immigrants	satisfy	liberal
sanders	washingtonpost	criminals	block	satisfy	iran	meddling	opinions	chain	filed	crazed
psycho	cnn	catch	poison	radicals	turkey	delusion	castro	illegals	peaceful	antifa
harris	cover	unchecked	signal	seek	plague	investigations	satisfy	traffickers	thugs	socialist
ban	comcast	gangs	regardless	bunch	countries	collusion	nervous	stopping	groups	aoc
eyes	fakenews	aliens	amnesty	regardless	tariffs	uranium	constitutional	lowering	protesters	looters
digenova	reporting	violent	cross	arsonists	product	ukraine	dem	barrier	heads	dem
hiden	coverage	violence	succeed	constitutional	talks	illicit	eyes	lottery	despicable	squad
vowed	false	migration	killings	blows	nafta	unhappy	hated	migration	radicals	mob
super	msdnc	trafficking	sudden	refusing	nato	conspiracy	crazed	unchecked	requested	controlled
pledged	mainstream	merit	lawless	socialists	cash	hoax	hypocrites	flow	politicians	majority

Frequency by Month: "China"
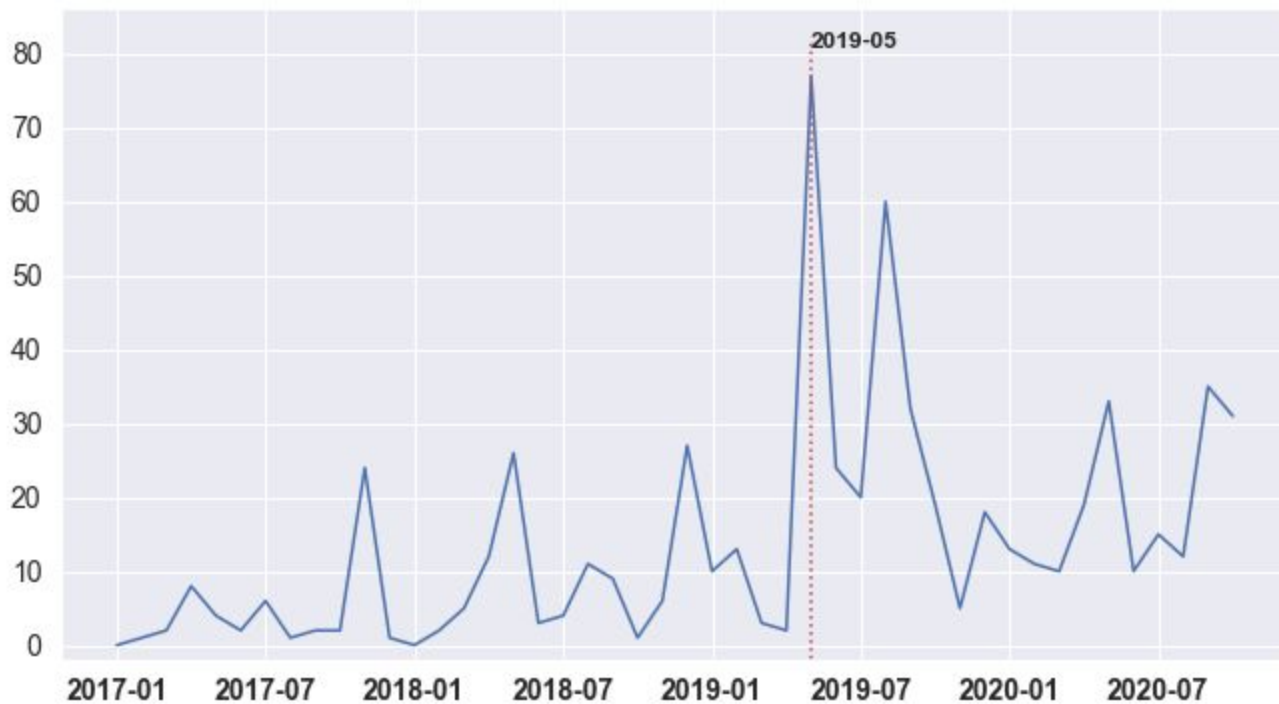
May 2019

- May 10th: US raises tariffs on Chinese imports from 10% to 25%
- China retaliates with tariffs that immediately impact his base
  - Farmers: Pork, Beef, Vegetables
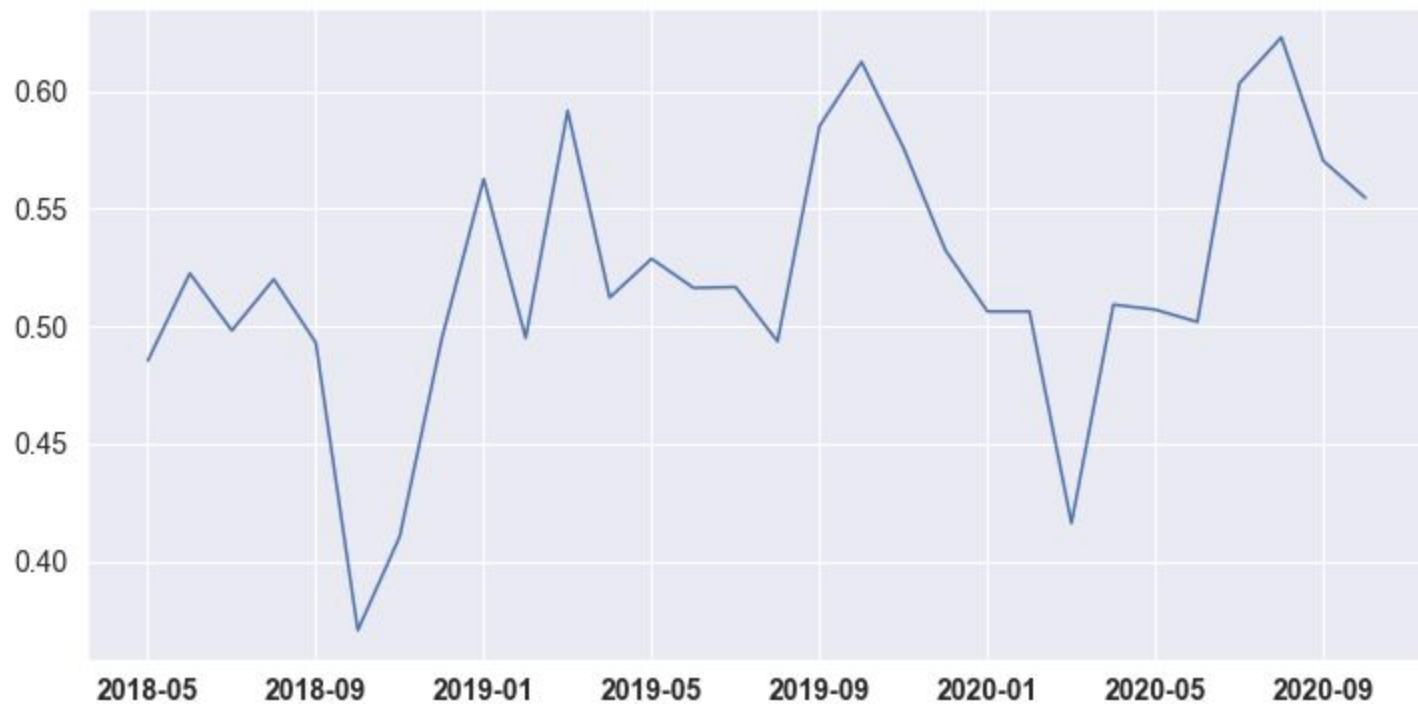- Immediately jumpstarts a campaign to give struggling farmers assurance

Donald J. Trump ✓ @realDonaldTrump · 16h

For 10 months, China has been paying Tariffs to the USA of 25% on 50 Billion Dollars of High Tech, and 10% on 200 Billion Dollars of other goods. These payments are partially responsible for our great economic results. The 10% will go up to 25% on Friday. 325 Billions Dollars....

💬 11K   ⟲ 22K   ♡ 82K

Donald J. Trump ✓
@realDonaldTrump

Follow

....of additional goods sent to us by China remain untaxed, but will be shortly, at a rate of 25%. The Tariffs paid to the USA have had little impact on product cost, mostly borne by China. The Trade Deal with China continues, but too slowly, as they attempt to renegotiate. No!

9:08 am - 5 May 2019

China and Farmers Relationship

Sentiment Analysis

•••

Percentage of Negative Tweets

Percentage of Negative Tweets

Future Work

Market and Sentiment Analysis
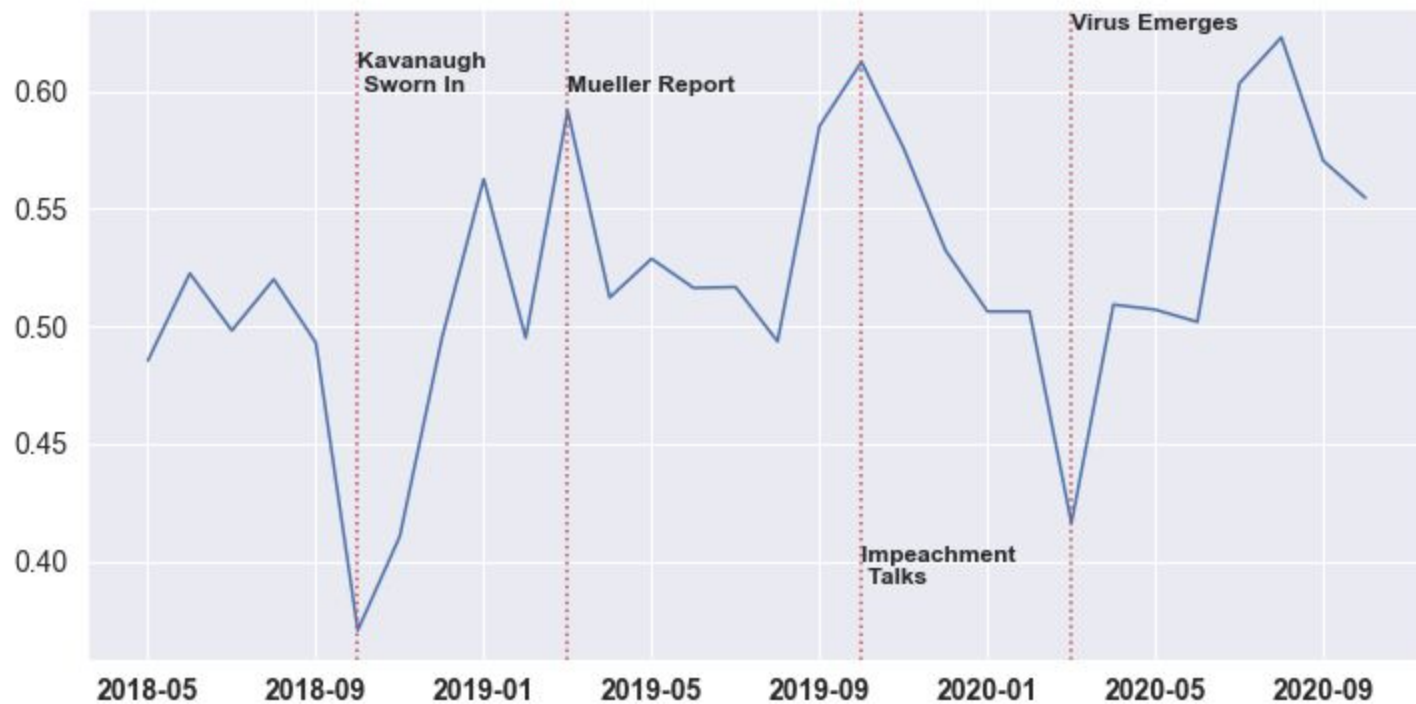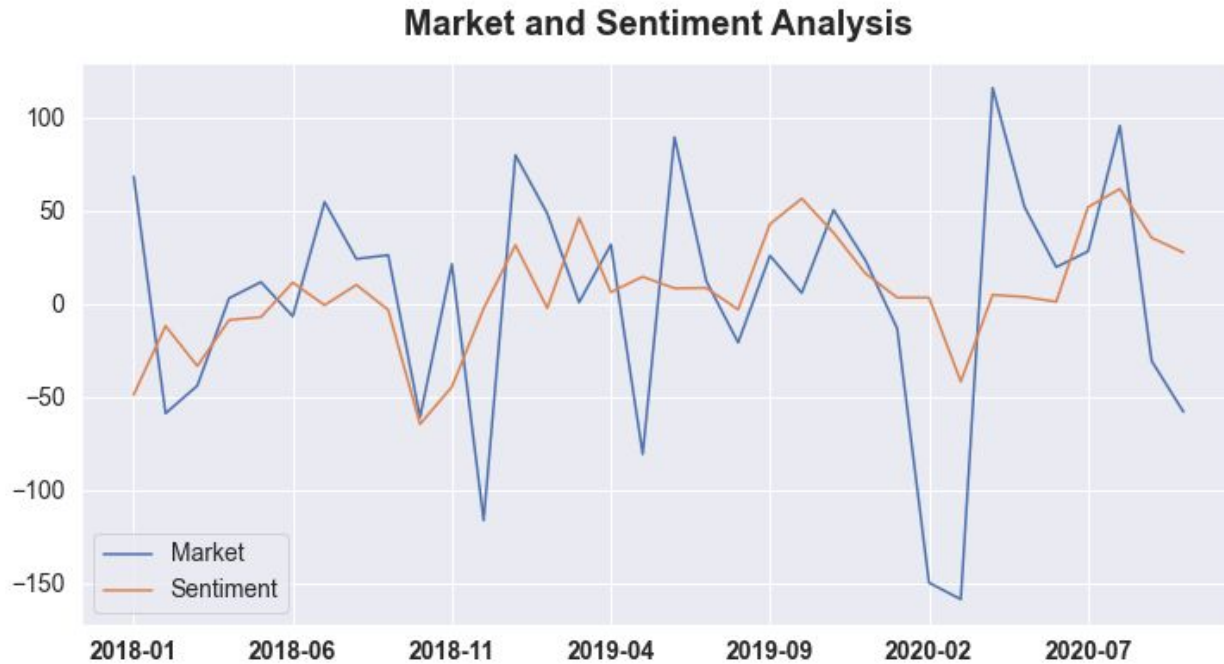
Questions?

Mail and Ballots Relationship
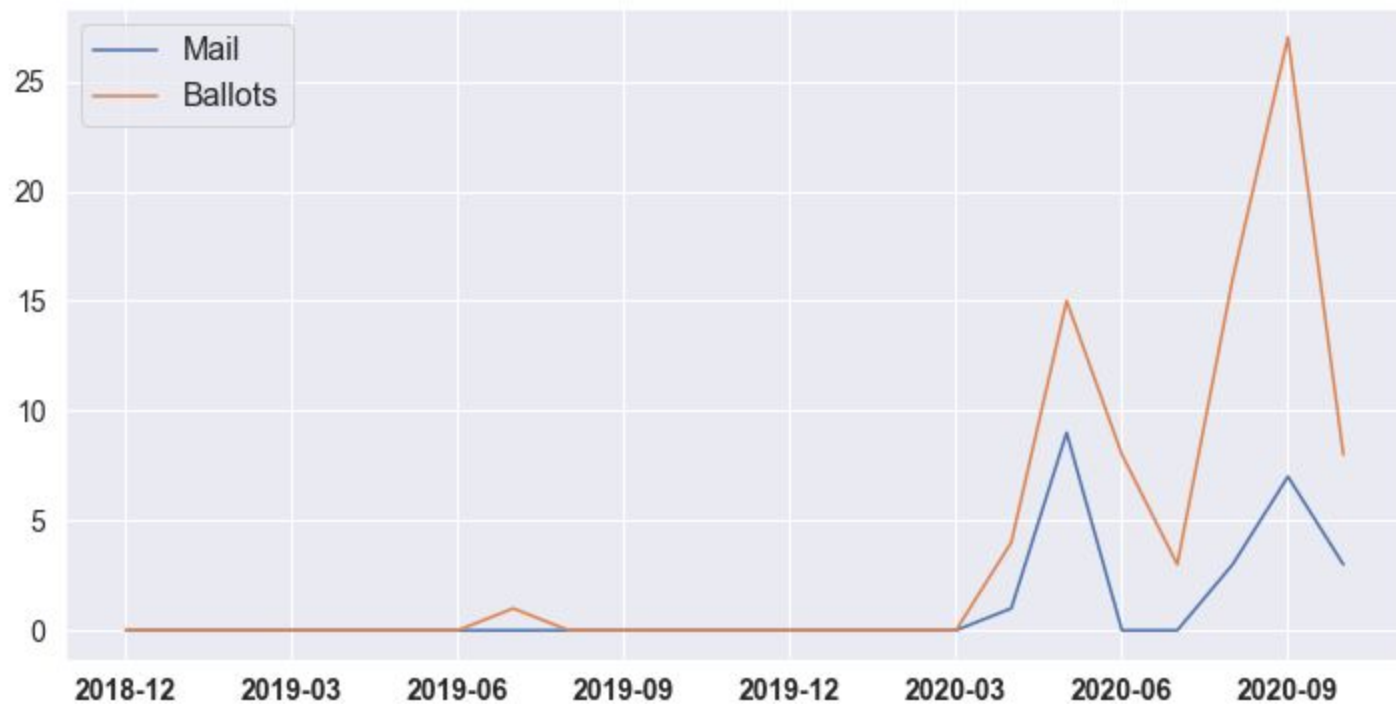
Resources:

- Trumps Tweets:
  - https://www.thetrumparchive.com
- Politico
  - *Why Trump Tweets (And Why We Listen)*
- China-Briefing.com
  - *The US-China Trade War: A Timeline*
- Wikipedia
  - *Timeline of the Donald Trump Presidency*