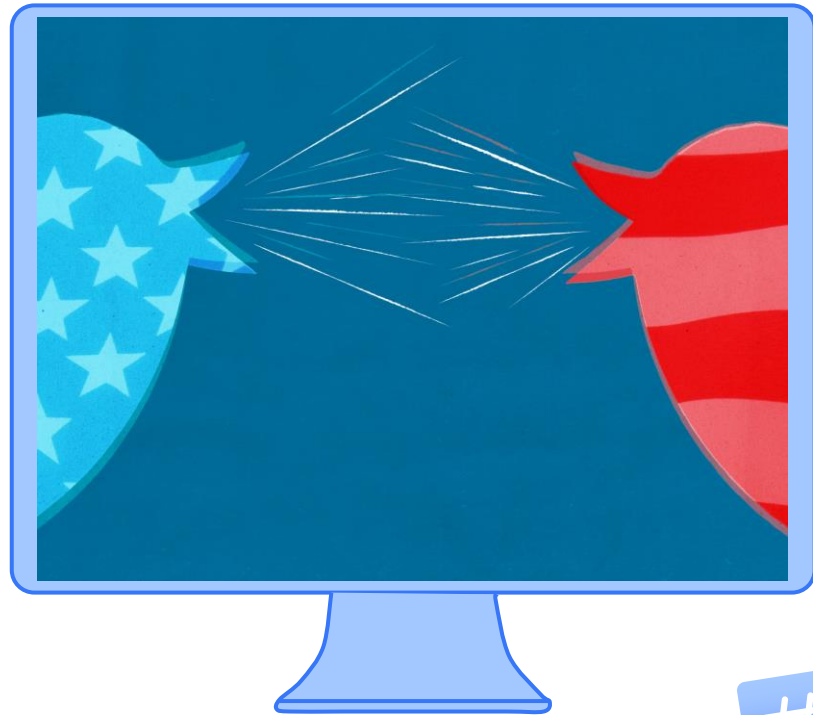


#ElonMuskBuysTwitter 🔍

Twitter's Dilemma

A sentiment analysis on Elon Musk's buyout of the social media company.

Josh Wang, [Metis](#), 2022/05/18



Background



- Twitter has long been seen as a left-leaning platform



- Elon Musk is a politically-incorrect libertarian entrepreneur



Background



As the new face of Twitter, Elon's public image affects the fate of the company.

It is important to understand the public reception of Elon's Twitter buyout.

The Data



Data came from tweets from Twitter users based on keywords/hashtags related to Elon Musk and his Twitter deal



Apr 5, 2021

Relatively
uneventful time
point as the control.



Apr 14, 2022

Elon first
announced his
offer.



Apr 25, 2022

Elon's deal was
accepted by
Twitter.

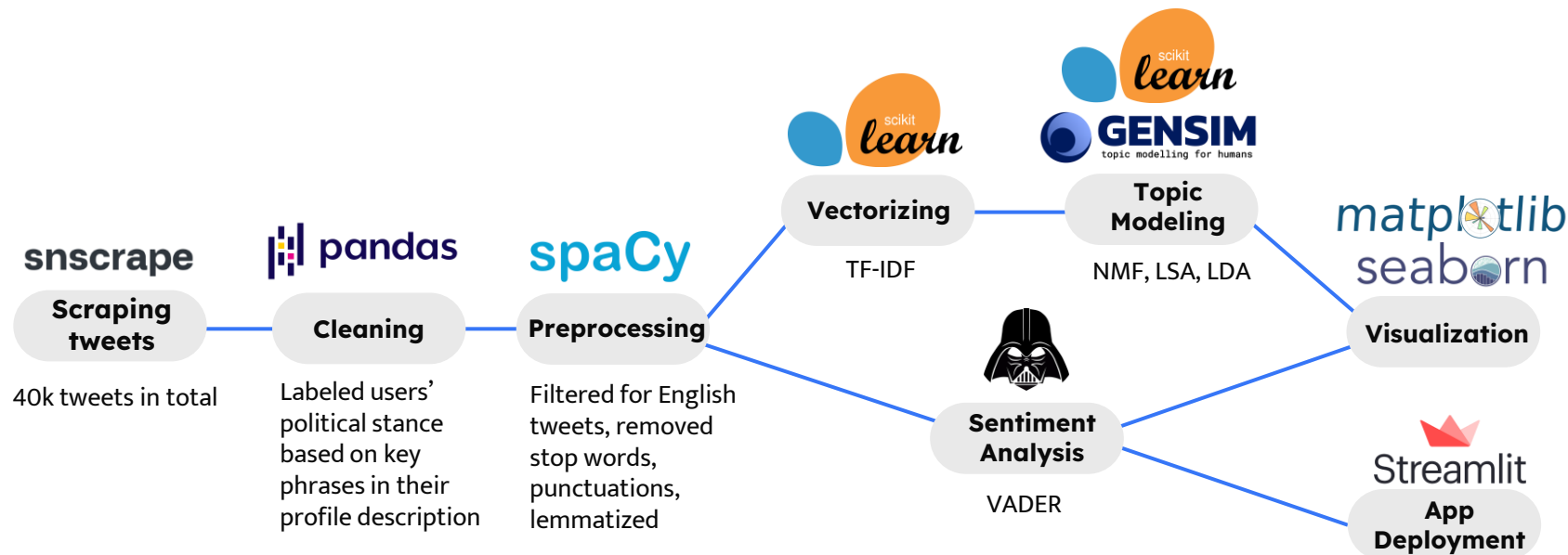


May 10, 2022

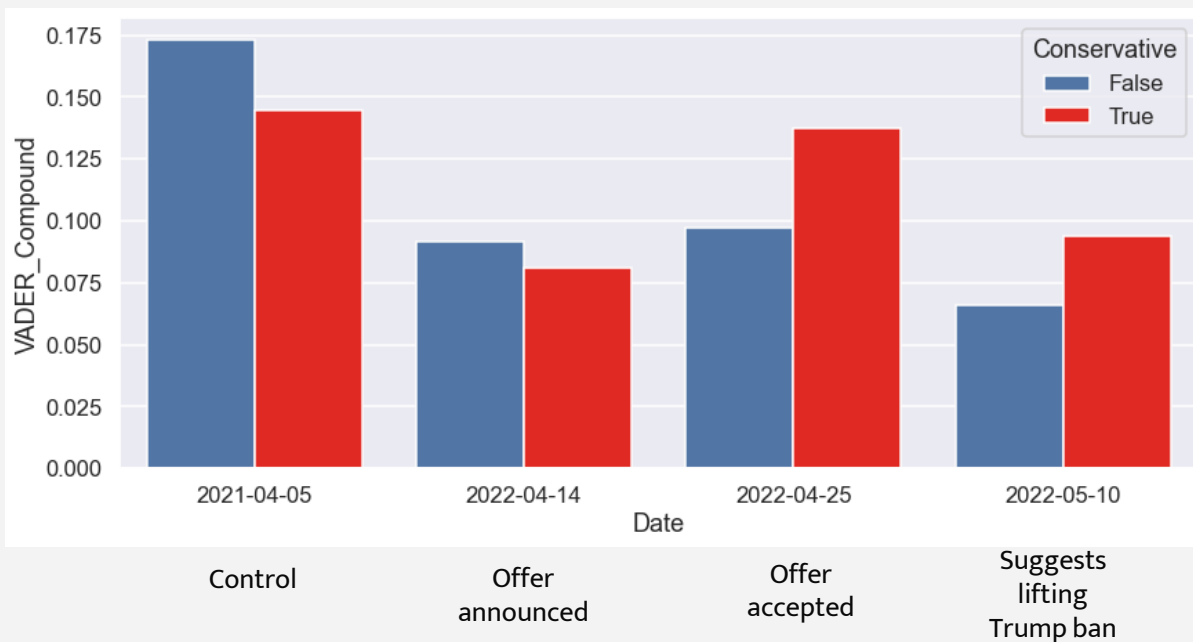
Elon tweets that he
would unban
Trump.



Methodology



Twitter Sentiment towards Elon over time



Twitter Sentiment towards Elon over time

Q



Description	CleanedText	VADER_Compound
Conservative.Pro-Christ.us. Digitale Army Soldier,Defender of Truth,and a Fighter for Freedom.	I'm leaving Twitter forever. I found out Elon Musk bought Twitter & fell to my knees & sobbed. I'm terrified for Democracy. It's been almost a half hour now. I'm still laying in a puddle of my own piss. Luckily my 4 masks dull the stench. I'm literally shaking. Putin did this 🤔	-0.9442
Husband & Father. Army Combat Vet - 11BM - Purple Heart. I ❤️ Jesus, Family and Country. Unapologetically Patriotic. Crypto sales=instant block.	Elizabeth Warren is scared to death of Elon Musk buying Twitter. Pocahontas just doesn't want people calling her out on her continual lies and brain dead perspectives.	-0.9340
Mom, #digitalmarketingexpert, #trumpeter, and fully devoted follower of Christ. Music Director & Alto for the singing group Minstrel Cycles	As a slightly cynical Gen Xer who has always believed America is genocidal narcissistic wasteland, Im unbothered by Elon Musk buying Twitter. Billionaires don't cause people to be crappy. Racism & poverty have existed long before Twitter. Our thinking has always been controlled	-0.9233

Control
Other
announced
Other
accepted
lifting
Trump ban

Negative tweets of conservatives are mostly
sarcastic or antagonistic towards the other side.

Topic modeling by Latent Semantic Analysis



Twitter and Free Speech



Text	free speech
Free Speech per Elon Musk <URL>	0.62278
Seems Elon is for free speech for everyone, even you <URL>	0.62278
What was that about free speech elon?	0.62278
Elon "Free Speech is when I have all of it" Musk <URL>	0.62278
YOU GO ELON MUSK!! FREE SPEECH IS BACK!!	0.62278
Free speech only if you love Elon Musk 😊	0.53665

Topic modeling by Latent Semantic Analysis



Buying Stocks and Crypto



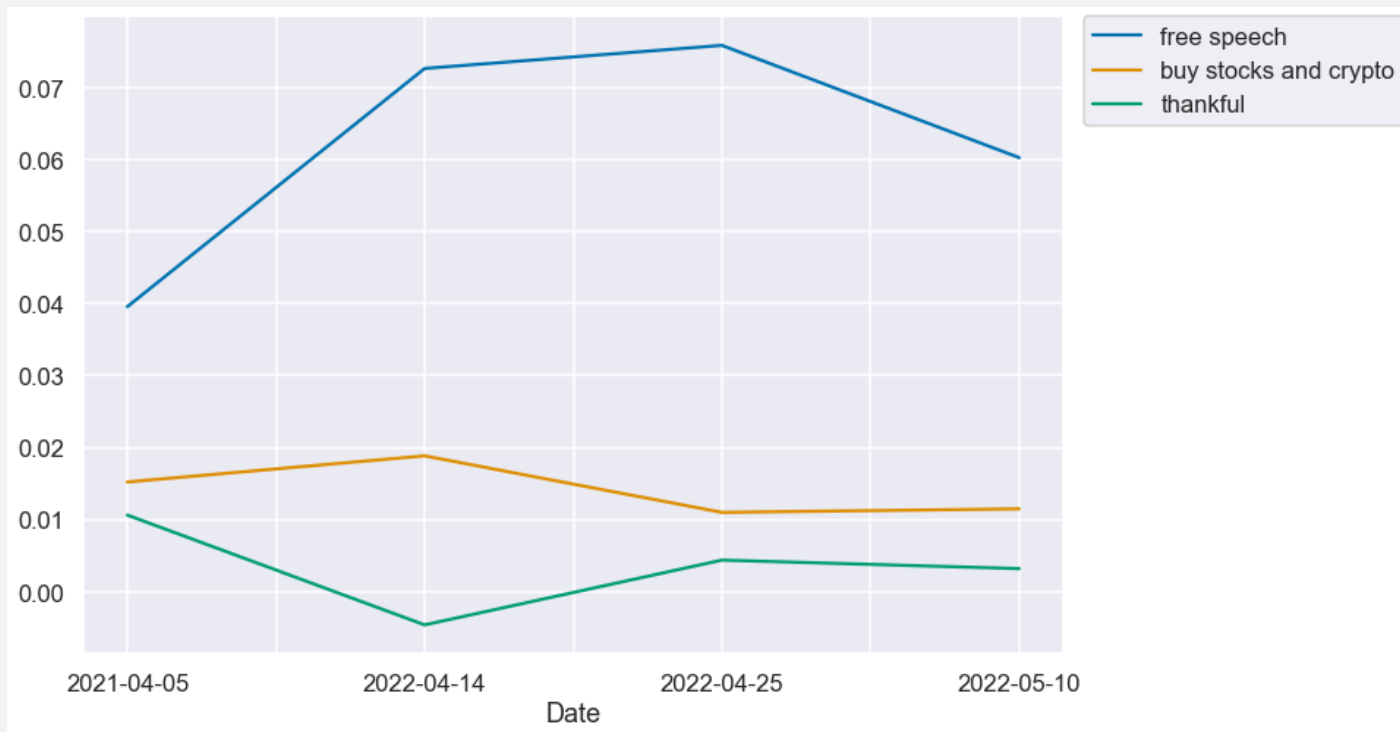
Text	buy stocks and crypto
Will Elon Musk buy Twitter?	0.70262
Elon, buy \$DOGGER and its over. Everyone will swarm there	0.70262
Is this all over Elon Musk buying Twitter?	0.70262
Is this because Elon Musk bought Twitter?	0.70262
Elon Musk bought twitter	0.70262
Elon musk bought Twitter	0.70262
If Elon buys out Twitter I'm out #noMusk	0.70262
Only buy babydogeeeee 🐶🐶🐶🐶🐶 <URL>	0.70262
Elon Musk buys #LunaFoundation <URL>	0.70262

Topic modeling by Latent Semantic Analysis



Text	thankful
Elon thanks for SAVING TWITTER!!!!	0.40392
Elon please remove all of these bots thank you ser 🙏	0.39719
Elon is the GOAT! ❤️ Thank you, thank you, thank you 🙏 You are exactly what this country needs right now. Stop the censoring/ corruption	0.39407
Please allowto give internet access to Myanmar through StarLink Thank you so much Elon for supporting our fight against dictatorship God Bless Americans #WhatsHappeningInMyanmar #Apr5Coup #InternetShutdown<URL>	0.39377
Please allowto give internet access to Myanmar through StarLink Thank you so much Elon for supporting our fight against dictatorship God Bless Americans #WhatsHappeningInMyanmar #Apr5Coup #InternetShutdown<URL>	0.39377

Topics over time



Streamlit Deployment

Sentiment analysis app:

Input: keyword,
political_stance, date

Output: average
sentiment of tweets
matching the criteria

First, test the VADER sentiment analyzer with your own sentence:

type your sentence here:

The sentiment score of your sentence is:
0.077

Next, input search parameters to get twitter sentiment:

Keyword (case insensitive):

e.g.: Trump

Conservative:

Any

Date:

2022-05-10

Elon Twitter Buyout Sentiment App

This app displays twitter sentiment towards Elon's Twitter buyout based keywords.

Data source:

Ten thousand tweets from twitter users from 4 different time points:

- 4/5/21 as control
- 4/14/22 when Elon's offer was announced
- 4/25/22 when Elon's offer was accepted
- 5/10/22 when Elon announces he would unban Trump

Code can be found on [my Github repo](#).

Please the left sidebar to input your features:

	Keyword	Conservative	Date
0	e.g.: Trump	Any	2022-05-10

The average sentiment score of tweets matching your condition is:

nan, which is considered neutral.

See how your scores compare to the global average:





Thank you.

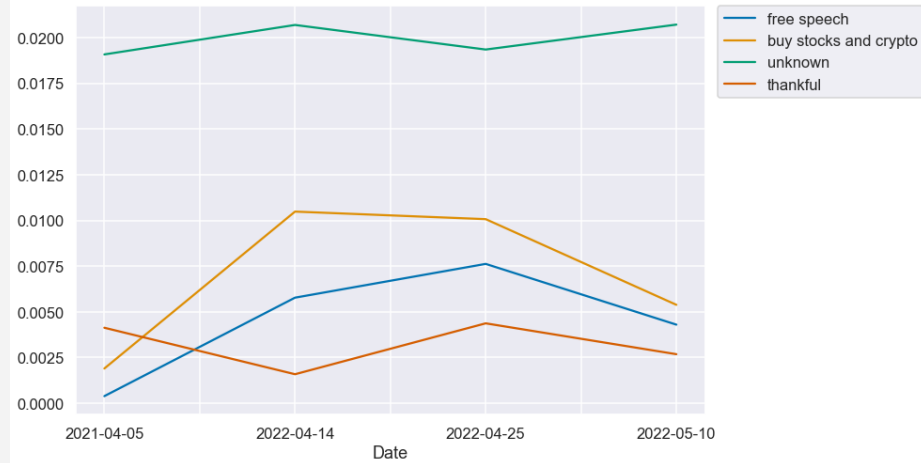
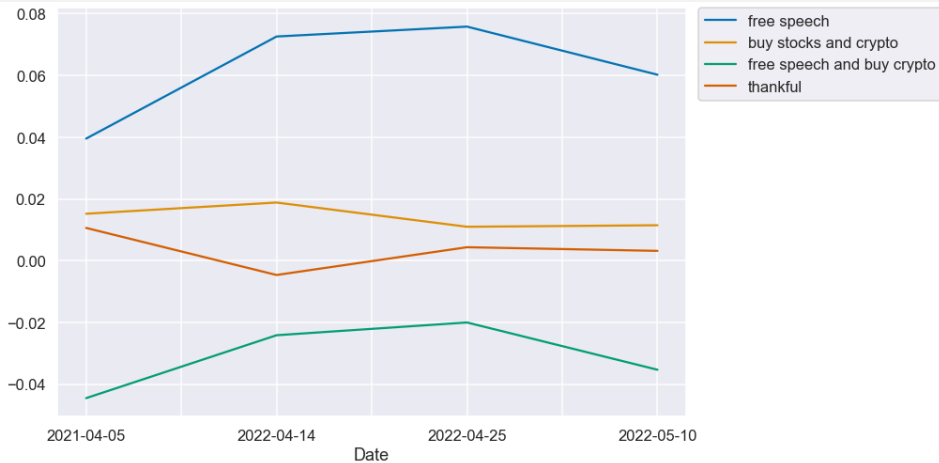
The code used for this project can be found here:
https://github.com/JoshJingtianWang/ElonMusk_NLP



POST

#

LSA and NMF



Topic 1
buy, speech, free, free speech, want, people, think, know

Topic 2
buy, tesla, money, want buy, think, billion, stock, buy luna

Topic 3
buy, free, speech, free speech, buy luna, luna, want buy, buy buy

Topic 4
thank, god, support, bless, need, thank support, god bless, americans

Topic 1
speech, free, free speech, freedom, want, freedom speech, platform, want free

Topic 2
buy, want buy, buy luna, luna, bring, want, billion, buy tesla

Topic 3
think, people, know, want, tesla, tweet, money, good

Topic 4
thank, god, support, bless, thank support, god bless, internet, fight