

GET BENT!

An Ideological Classifier

Steven Penn Markoe
Data Scientist
October 2020



VIEWER DISCRETION ADVISED

**Twitter is a weird
place.**



Kaitlan Collins ✓

@kaitlancollins



President Trump's brother, Robert, has died. "It is with heavy heart I share that my wonderful brother, Robert, peacefully passed away tonight," he says in a statement. "He was not just my brother, he was my best friend. He will be greatly missed, but we will meet again."

10:29 PM · Aug 15, 2020 · Twitter for iPhone

426 Retweets **243** Quote Tweets **2.7K** Likes

[U.S.](#)
[World](#)
[Opinion](#)
[Politics](#)
[Entertainment](#)
[Business](#)
[Lifestyle](#)
[TV](#)
[Fox Nation](#)
[Listen](#)
[More](#)

[Login](#)
[Watch TV](#)

[Hot Topics](#)
[Coronavirus](#)
[Supreme Court](#)
[2020 election](#)

DONALD TRUMP · Published August 16

Hashtag #wrongtrump trends on Twitter after death of president's brother

The hashtag was shared by those who claim the president should have died

By Ronn Blitzer | Fox News

Robert Trump, President Trump's brother, dies
Robert Trump, President Trump's brother and Trump Organization executive, has died after an illness.

- ✓ Delegate Tracker
- ✓ Election Results
- ✓ Primary Calendar
- ✓ and more...

Get all the stories you need to know from the most powerful name in news delivered first thing every morning to your inbox

Arrives **Weekdays**

Subscribe

2020 Presidential Election

Joe Walsh ✓ @WalshFreedom · 23h

One man went to church today. And then visited his son's gravesite.

1K

30.2K

97.3K

Adam M Feinberg @adamfeinberg · 8h

And ALL lib media fueled **#wrongtrump** when Robert died. The hypocrisy is awful.

Terrence K. Williams ✓ @w_terrence · Sep 5

Yes President Trump attacked the late John McCain because John McCain attacked him so what did y'all expect? Trump respected McCain for his service but our President is not a punk and he won't let people bully him.

886

5.1K

23.7K

Mike Yoder @Yoder_Esqq · Sep 5

Keep in mind, when @realDonaldTrump's brother died, the left got **#WrongTrump** trending.

3

43

155

2020-08-16 02:55:33+00:00	Lmao at wrong trump trending
2020-08-16 02:55:30+00:00	The wrong trump died.
2020-08-16 02:55:17+00:00	The wrong trump died today.
2020-08-16 02:55:04+00:00	Yâ€™all got wrong trump trending ðŸ˜˜-ðŸ˜˜-ðŸ˜˜-ðŸ˜˜-ðŸ˜˜-
2020-08-16 02:54:49+00:00	God took the wrong trump _-
2020-08-16 02:54:34+00:00	god... thatâ€™s twice now you took the wrong trump brother. couldnâ€™t you have just sent another flood?
2020-08-16 02:53:13+00:00	The wrong trump kicked the bucket ðŸ˜˜ðŸ˜˜â€œðŸ˜˜,i,ðŸ˜˜
2020-08-16 02:52:52+00:00	Dammit wrong trump
2020-08-16 02:52:37+00:00	@ god, wrong trump dude
2020-08-16 02:50:58+00:00	the wrong trump died but I'm sure Robert was an asshole too
2020-08-16 02:50:38+00:00	wrong trump died
2020-08-16 02:50:33+00:00	Noo Annabelle got the wrong trump ðŸ˜˜-
2020-08-16 02:49:55+00:00	I am not letting up on telling trump what I think of him and his immoral, corrupt, criminal regime. He has earned the
2020-08-16 02:49:44+00:00	To bad thr wrong trump was ill
2020-08-16 02:49:39+00:00	God killed the wrong trump #TrumpFailedAmerica
2020-08-16 02:49:37+00:00	wrong trump died
2020-08-16 02:49:10+00:00	you took the wrong trump ðŸ˜˜'
2020-08-16 02:48:34+00:00	wait wrong trump
2020-08-16 02:48:23+00:00	Simpsonâ€™s predicted the wrong trump smh. Jk I wish death upon nobody not even my worst enemy
2020-08-16 02:48:12+00:00	the wrong trump died....my wife just said you could eliminate the National Debt by selling tickets to djtâ€™s funeral!
2020-08-16 02:47:45+00:00	The wrong trump died. smdh
2020-08-16 02:47:20+00:00	The wrong trump died ðŸ˜˜
2020-08-16 02:47:02+00:00	Ffs wrong trump ðŸ˜˜ðŸ˜˜â€œðŸ˜˜,i,ðŸ˜˜,
2020-08-16 02:46:44+00:00	They really took the wrong trump ðŸ˜˜
2020-08-16 02:46:31+00:00	I fcking don't care wrong trump died as far as I'm concerned
2020-08-16 02:46:21+00:00	damnit. the wrong trump diedðŸ˜˜
2020-08-16 02:46:06+00:00	I think the wrong trump died.
2020-08-16 02:46:00+00:00	Got the wrong trump
2020-08-16 02:45:49+00:00	that was the wrong trump @ karma
2020-08-16 02:45:21+00:00	I donâ€™t know much about Robert Trump but, to be honest the wrong trump died. Sorry not sorry.
2020-08-16 02:44:31+00:00	dear god, u took the wrong trump family member
2020-08-16 02:43:15+00:00	the wrong trump died smh
2020-08-16 02:42:39+00:00	damn cuh yâ€™all took the wrong trump ðŸ˜˜ðŸ˜˜
2020-08-16 02:40:17+00:00	yo god wrong trump bro
2020-08-16 02:39:36+00:00	they got the wrong trump
2020-08-16 02:39:19+00:00	Not the wrong trump dying ðŸ˜˜„
2020-08-16 02:38:21+00:00	Dammit! The wrong trump died! ðŸ˜˜ðŸ˜˜â€œðŸ˜˜,i,ðŸ˜˜
2020-08-16 02:38:05+00:00	The wrong trump died
2020-08-16 02:37:39+00:00	anabelle.. baby.. wrong trump ðŸ˜˜ðŸ˜˜
2020-08-16 02:37:34+00:00	I might get suspended for this, but... The wrong trump died.
2020-08-16 02:36:32+00:00	Damn the wrong trump died ðŸ˜˜
2020-08-16 02:35:36+00:00	Damn wrong trump :/
2020-08-16 02:34:31+00:00	@ god you took the wrong trump this time ðŸ˜˜€
2020-08-16 02:34:18+00:00	The wrong trump died
2020-08-16 02:34:11+00:00	The wrong trump died

Problem Statment

- Looking at a politically charged Twitter hashtag, how do I know which users are conservatives and which are liberals?
- Given any polarizing topic, can I classify which conflicting ideology the individuals represent?

Some Assumptions

**1. Political
twitter is
dominated by
political users.**

*<https://www.pewresearch.org/politics/2019/10/23/national-politics-on-twitter-small-share-of-u-s-adults-produce-majority-of-tweets/>

**2. Political Twitter
is just two
competing
ecosystems.**

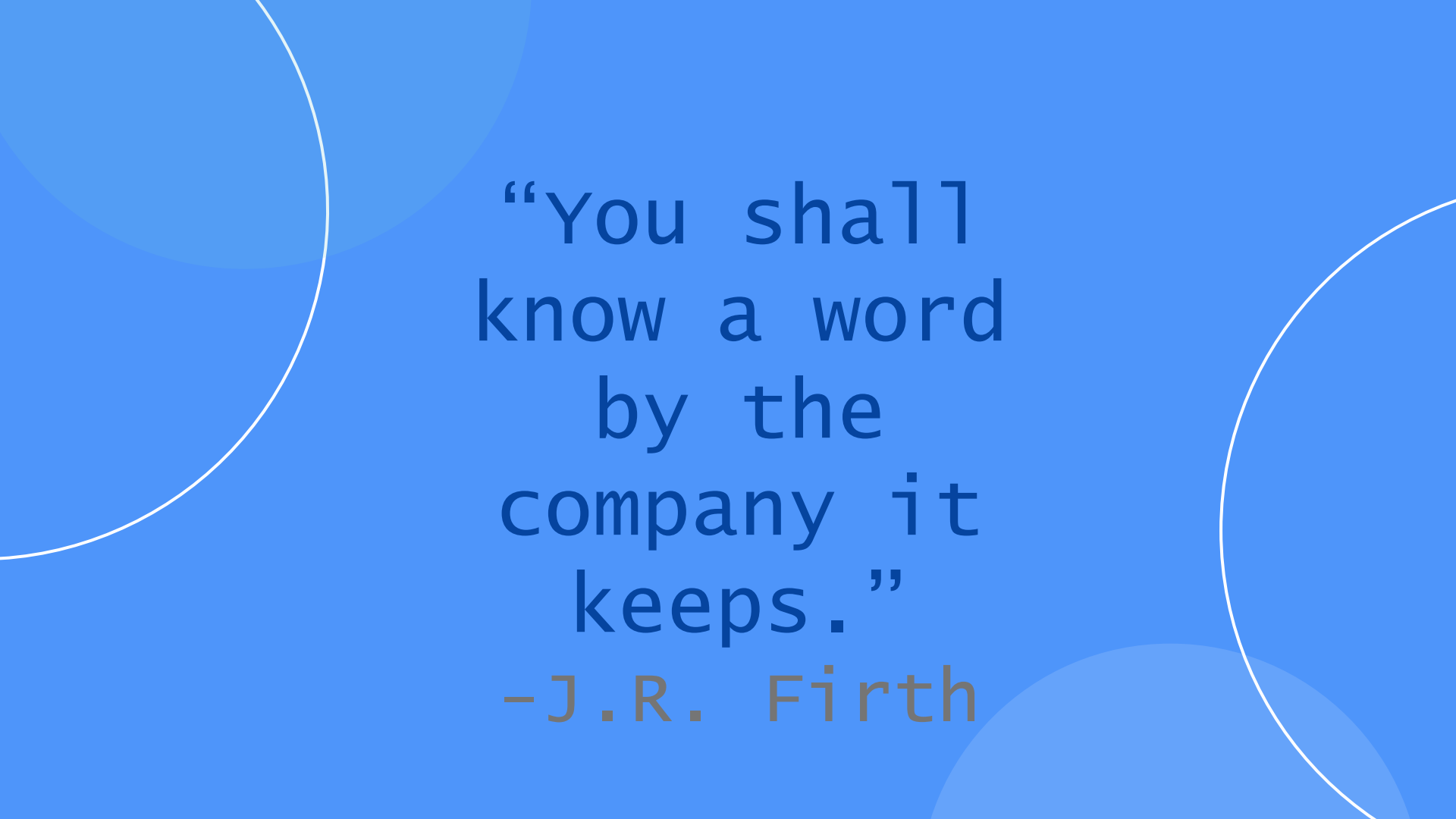
*American politics

Scrapping

- GetOldTweets3 and snsrape
 - All tweets, hashtags
 - No retweet content
- Suspended users
 - Name changes
 - Bots
 - Hundreds of thousands of individual tweets

Data Overload!

**Count Vectorizer?
or Tf-Idf?**

The background is a solid blue color. There are several large, overlapping white circular outlines scattered across the image, creating a modern, abstract design.

“You shall
know a word
by the
company it
keeps.”

—J.R. Firth

doc2vec

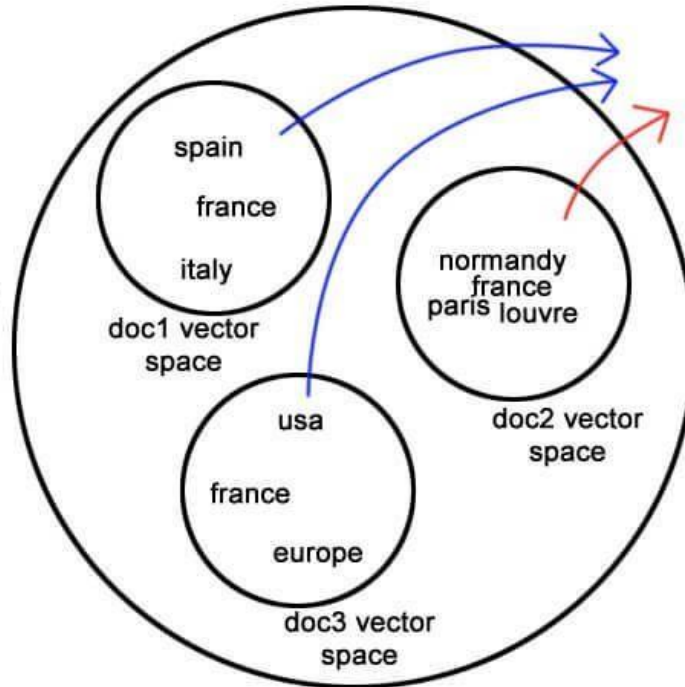
Input:
many document



doc1,
doc2,
doc3 ...

each
document
becomes
one vector
space

Model:

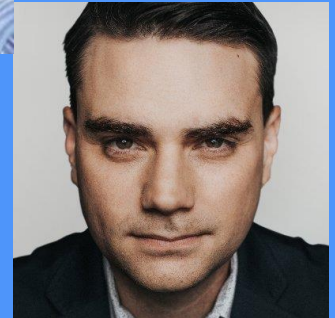


most_similar('france'):

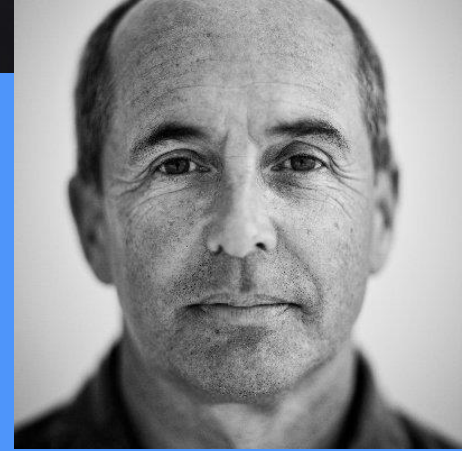
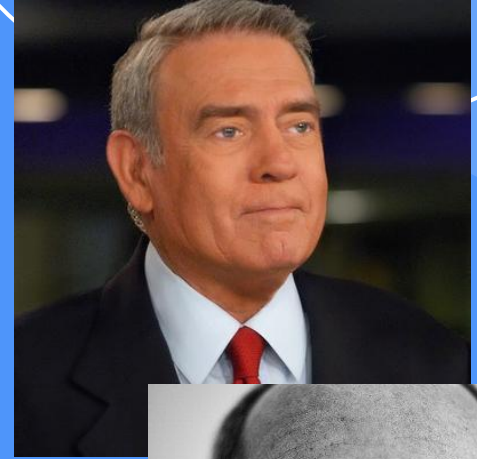
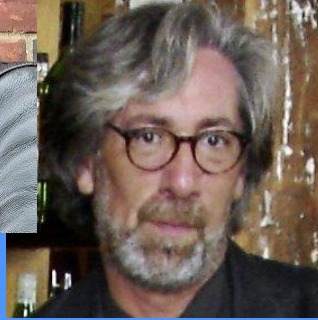
paris	0.876543
louvre	0.765432
normandy	0.654321
...	

highest cosine
distance value
in doc2 vector
space

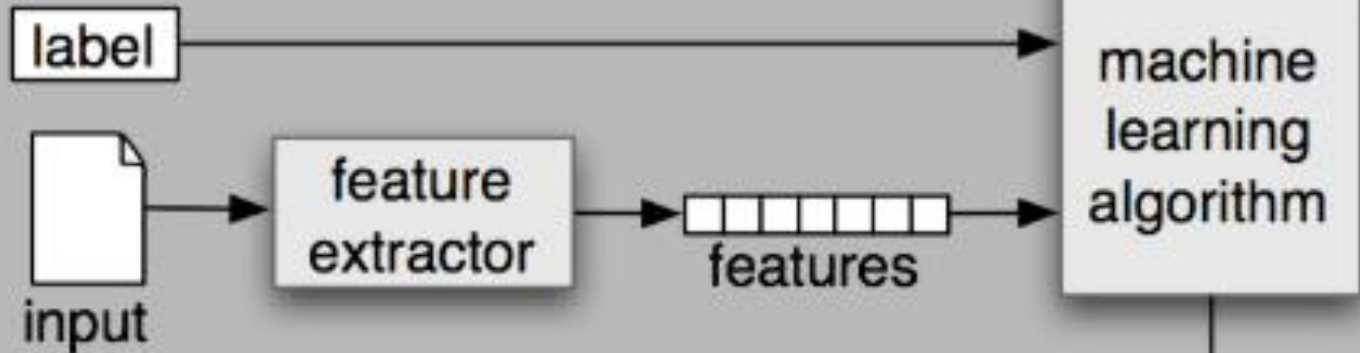
RedTeam!



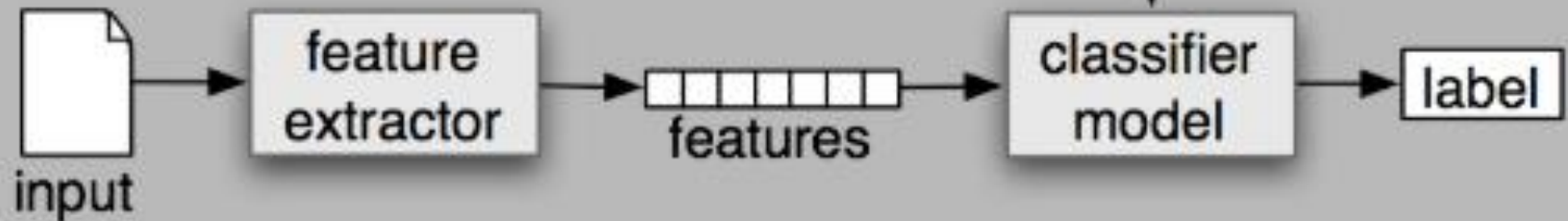
BlueTeam!



(a) Training



(b) Prediction



Modeling

Doc2Vec

- 300 Vectors
- 300 min
- 40 epochs

SVC

- Nothing
- Nearly perfect accuracy

CONCLUSIONS!

CONCLUSION 1

With the appropriate training set and Doc2Vec, users participating in a 'barbershop dispute' can be classified with relative ease.

CONCLUSION 2

Twitter is an enigma wrapped in two more enigmas.

Conclusion 3

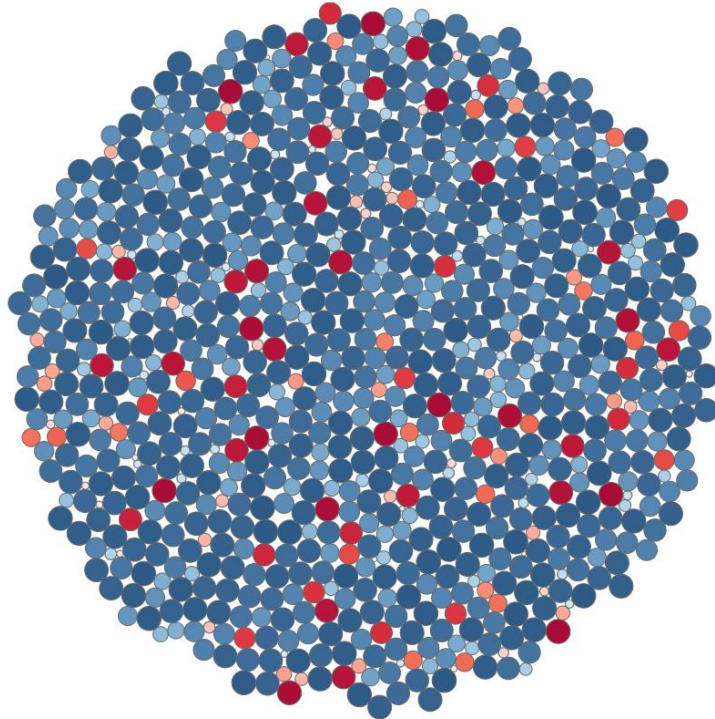
Training Data absolutely includes inherent bias.

Next Steps!

getbent.com: Discover
the political ideologies of
your brand's followers!

Tableau!

Twitter Users and their Predicted Political Ideology



Questions?

Thanks so much!

Steven Markoe
steven.markoe@gmail.com