

Analyzing Twitter Climate Change Conversations:

Using Data Engineering,
NLP, & Topic Modeling to
uncover Global Warming
Topics

trile



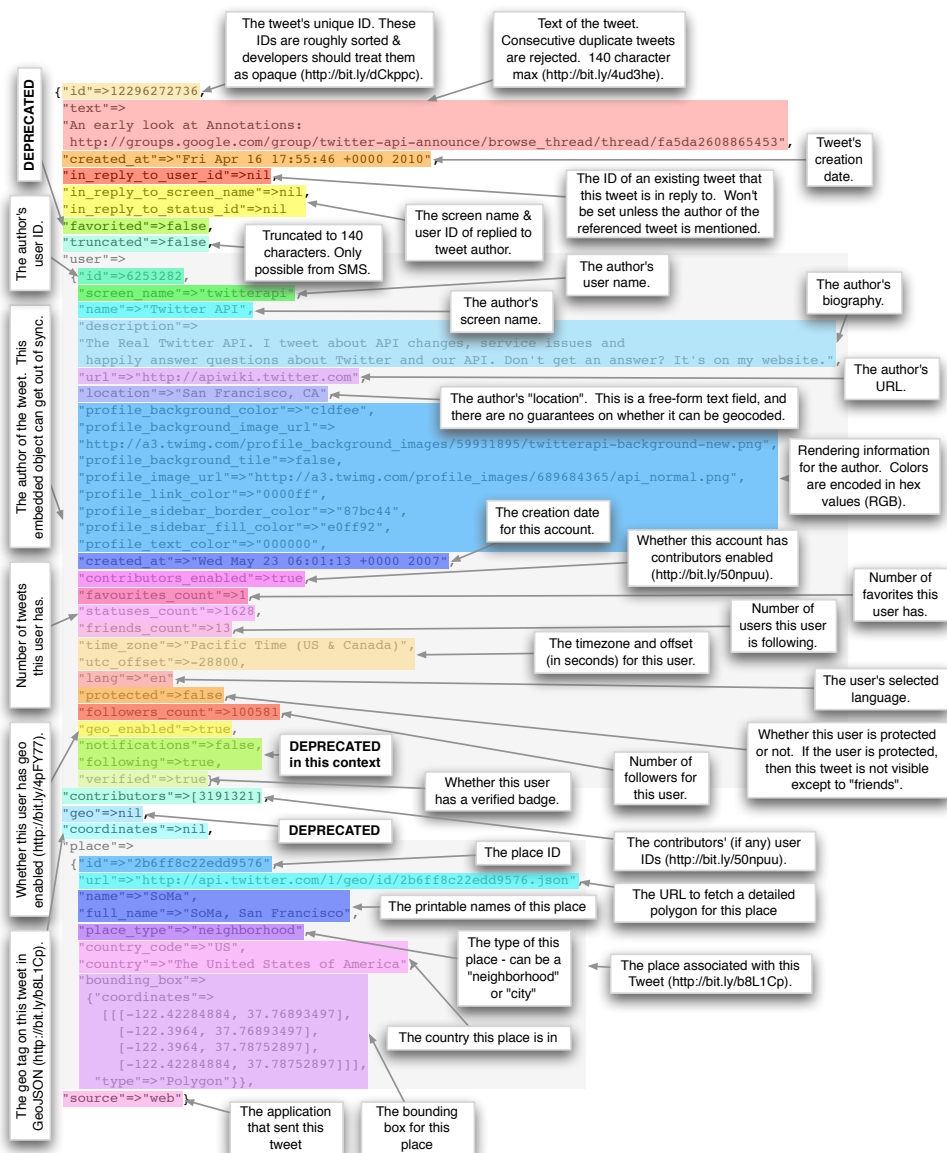
Twitter API 
@twitterapi

Hello Metis.

6:00 PM · Oct 5, 2022



What's in a Tweet?

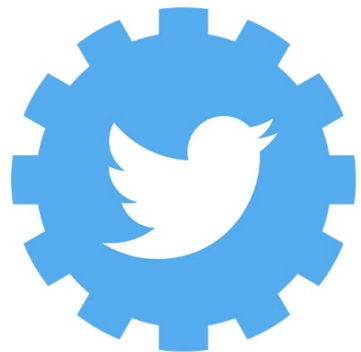


Data Features

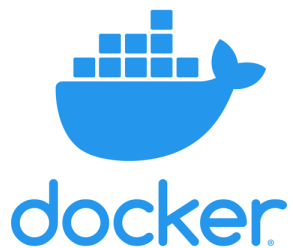
- Tweet Unique ID
- Tweet Location
- **Tweet Text**
- Twitter Username
- Retweet Count
- Follower Count
- Favorites Count
- Hashtags
- Mentions
- Etc.

900,000K+
Tweets





Methodology



Text Processing
& Dimensionality
Reduction

150,000+ words

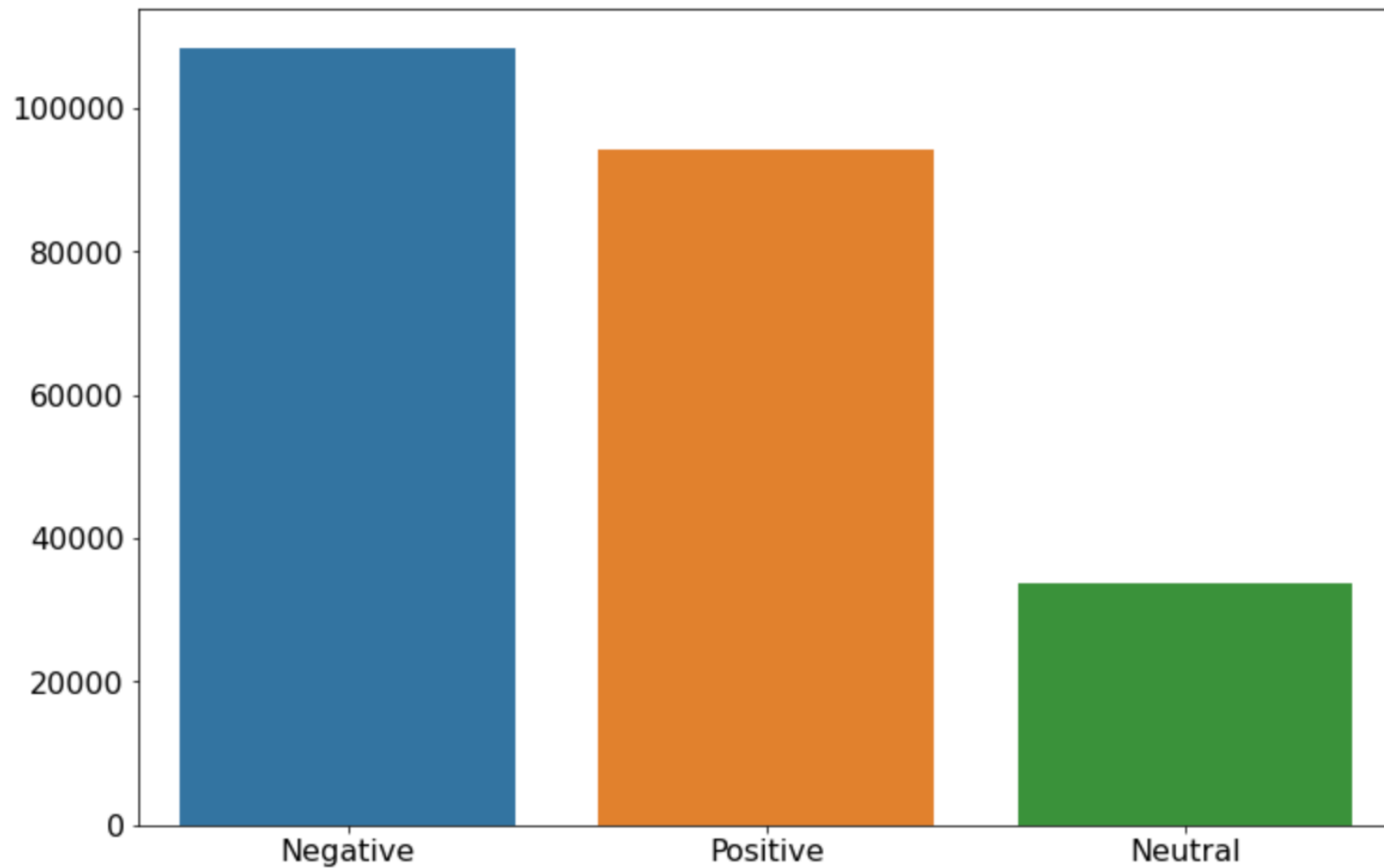


4 Topics

? words



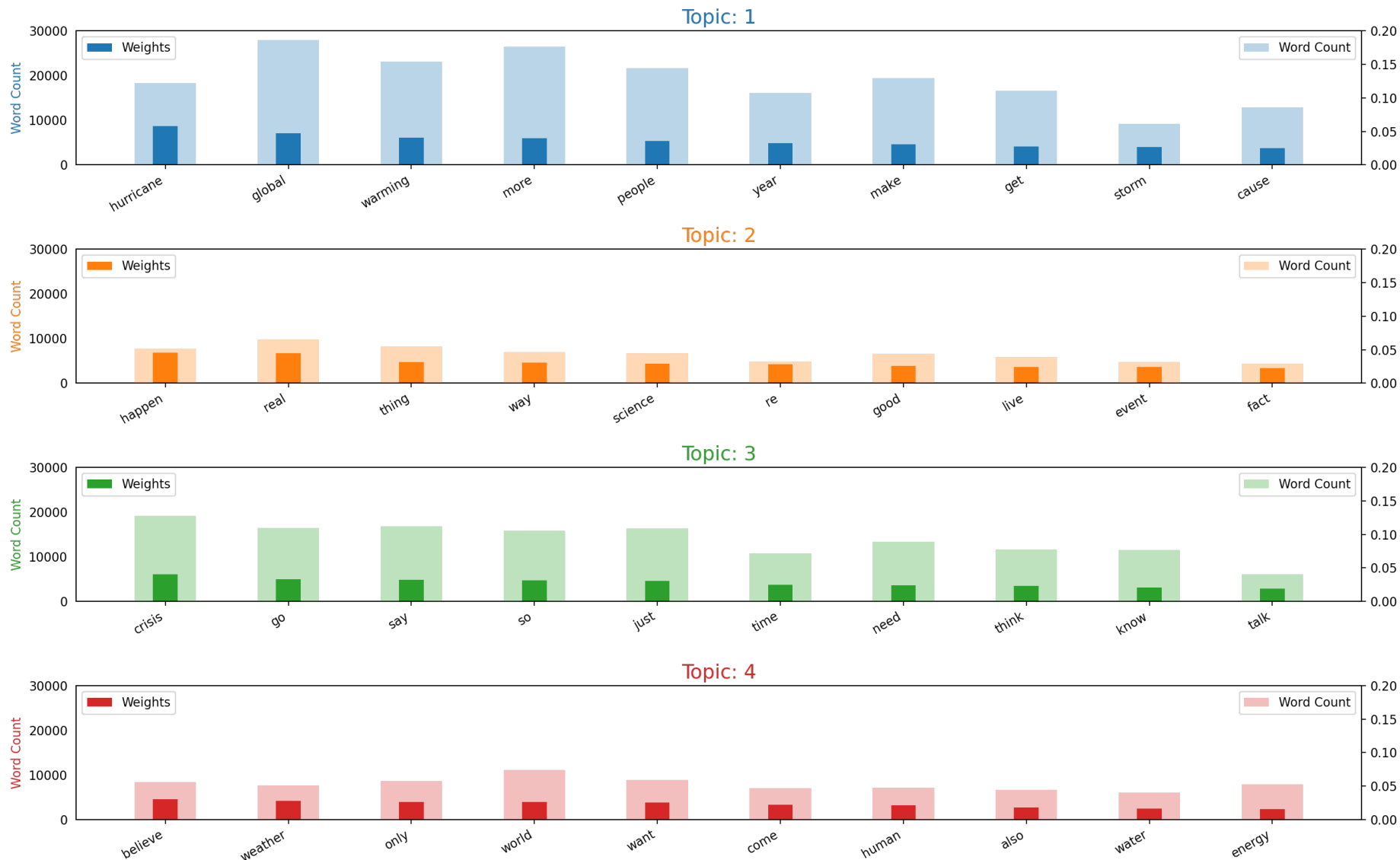
Sentiment Analysis







Findings: Topics





Conclusion

Topic 1:

Global warming is caused by people and results in “natural disasters”

Topic 2:

Climate Change is scientifically real and is happening

Topic 3:

Although Climate Change is a crisis, more time and discussion is required:

Topic 4:

Possibly, Climate Change is a believe to be caused by natural world weather:

Key Topic Terms

- Hurricane
- Global Warming
- People
- Cause

- Happen
- Real
- Science
- Fact

- Crisis
- Need
- Time
- Think

- Believe
- Weather
- World
- Human

Potential Future Work

Further Data Engineering:

- AWS
- MongoDB
- Streamlit and/or Heroku

Further Analysis:

- LSA & NMF
- Social Network Analysis
- Gelphi + NetworkX



Thank you!



metis 2022 oct



Twitter API 
@twitterapi

Questions?

6:e0 PM · Oct 05, 2022

