



Gauging NY Mental Health Through Covid-19 Tweets

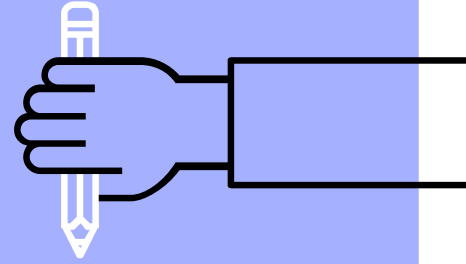


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Overview

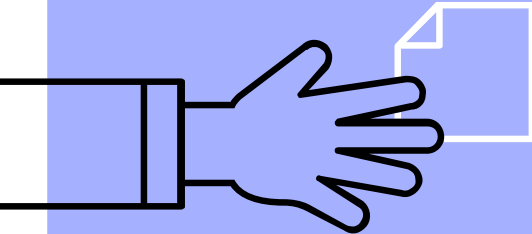
Dataset:

Covid-19 Tweets for the US from March 2020 - April 2021 IEEE



Goal:

Compare rates of depression related tweets, anxiety related tweets, and Covid Infection Rates in New York state



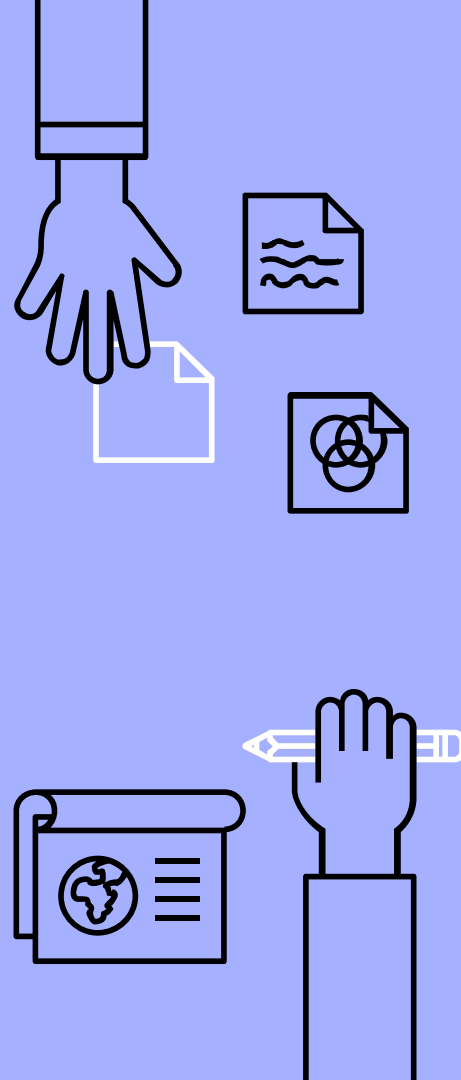
Rationale

- ▶ We want to compare rates of “depression” , “anxiety” related tweets and Covid infection numbers in New York
- ▶ **Why:** It is well known that people’s mental health quality declined during the Covid-19 pandemic. We want to explore whether that is reflected in social media.
- ▶ **Hypothesis:** Instances of depression and anxiety related tweets are positively correlated with increasing Covid-19 cases.



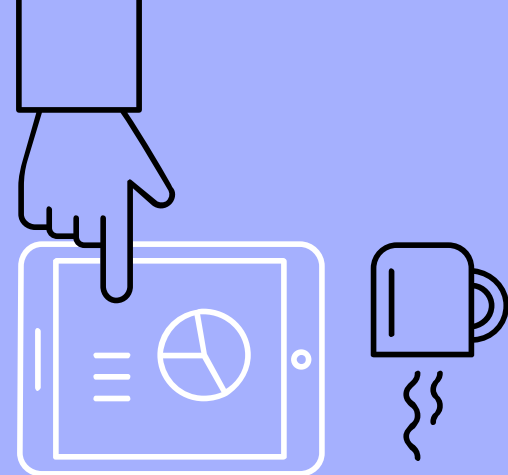
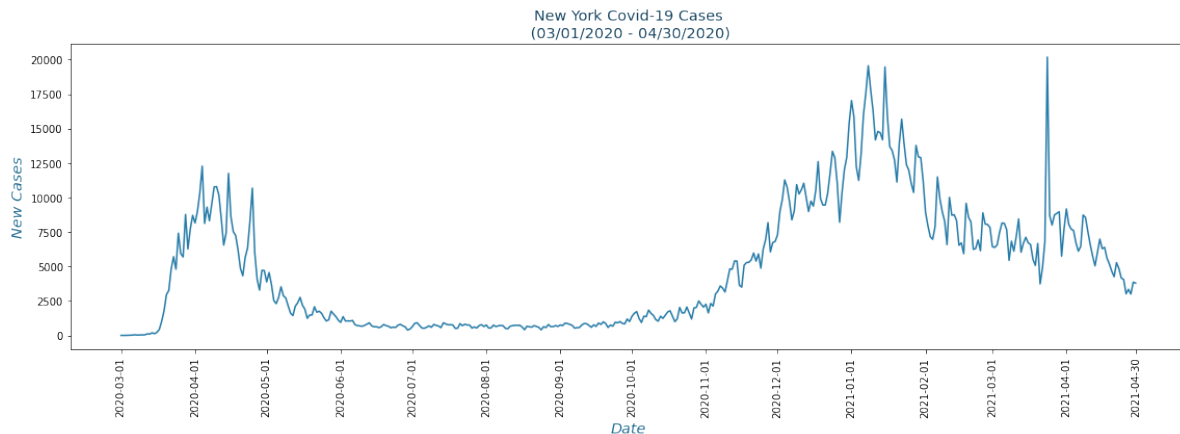
Method

- ▶ Original dataset: two columns (tweet id, sentiment score)
- ▶ Twitter API, request info for each Tweet (Tweet content, location, number of retweets, number of likes, datetime)
- ▶ Clean Data: NY State, mental-health related
- ▶ NLTK (tokenization, stopword removal, lemmatization)
- ▶ Identify sentiments through depression keywords
- ▶ Compare sentiments to COVID-19 cases
- ▶ Statistical Tests (Granger Causality)



Results

- ▶ No results yet; testing our hypothesis through the methods mentioned previously



Questions?

