Emoji Sentiment Perception & Usage

Group 9

Avak Archanian, Zhizheng Qiao, Jieyun Yang, Hangquan Zhao

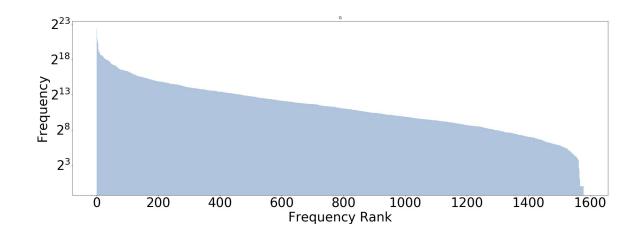


Introduction

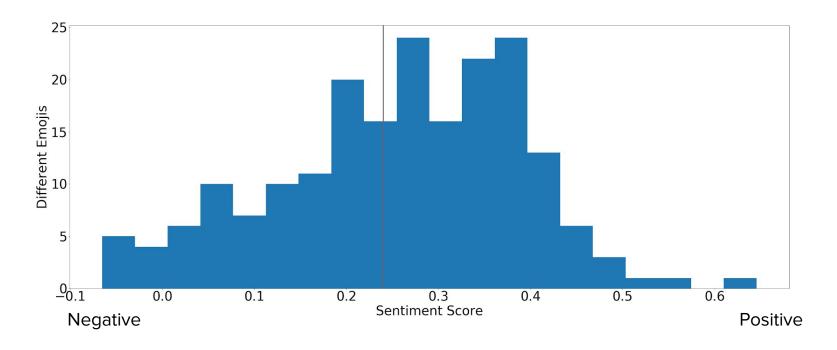
- General usage of emoji -- Sentiment score
- Sentiment perception difference in between readers and writers
- Further application

Dataset

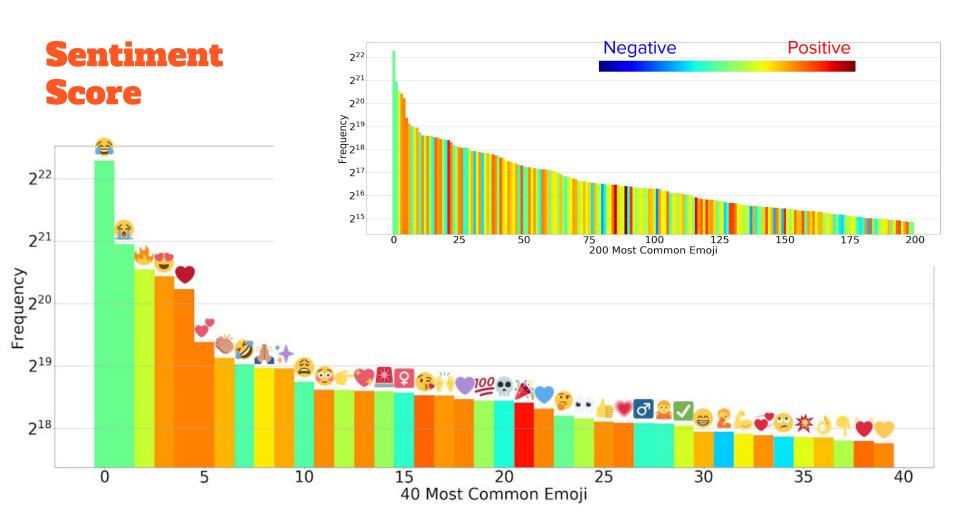
- Archive Team Twitter Stream & TextBlob
- 18,878,448 Tweets, 41,781,256 Emojis
- 1578 different Emojis from only 2 times to 847,220 times
- Top 200 Emojis

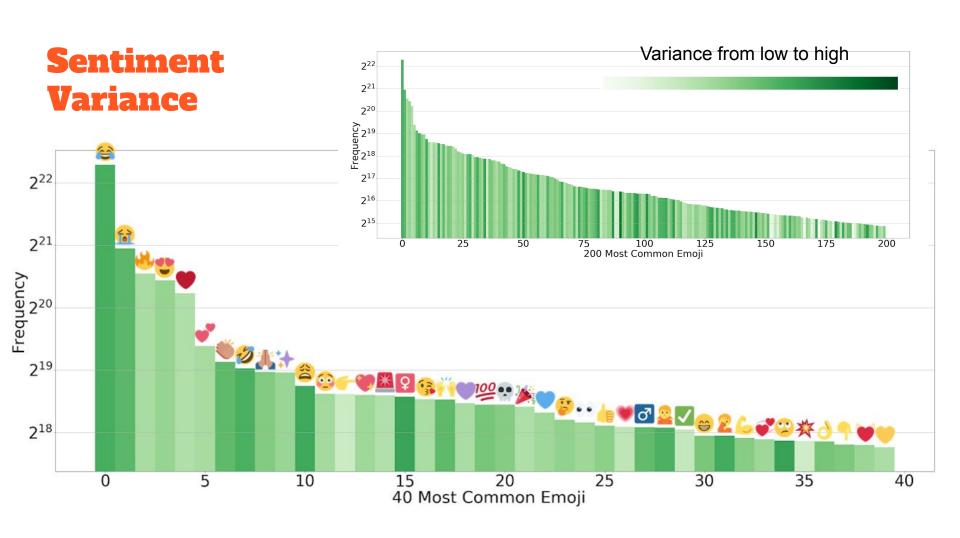


Sentiment Analysis

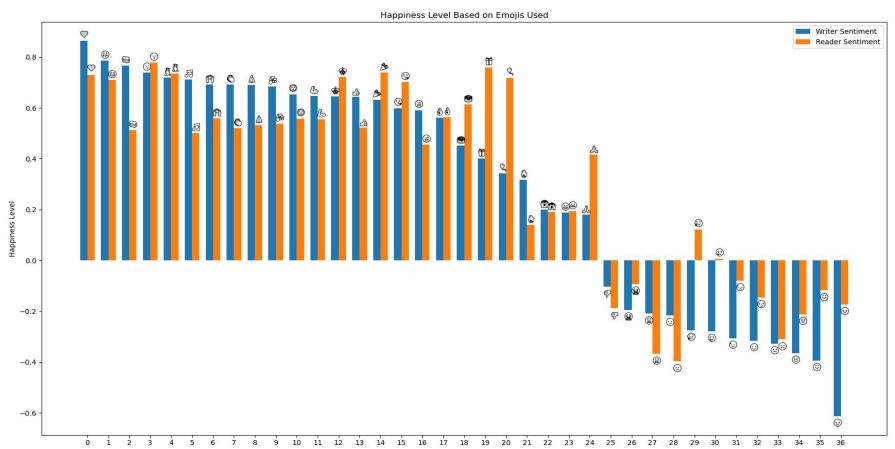


Mean sentiment score = 0.242

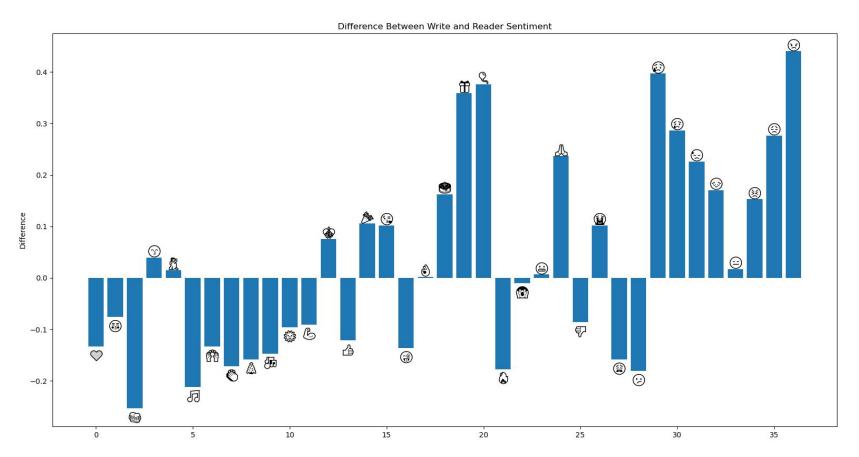


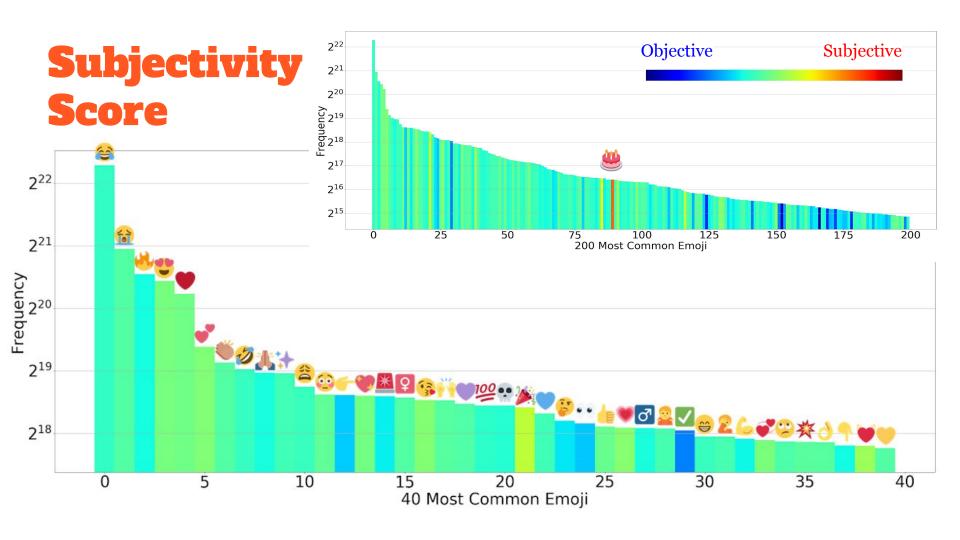


Sentiment of Writer vs. Reader

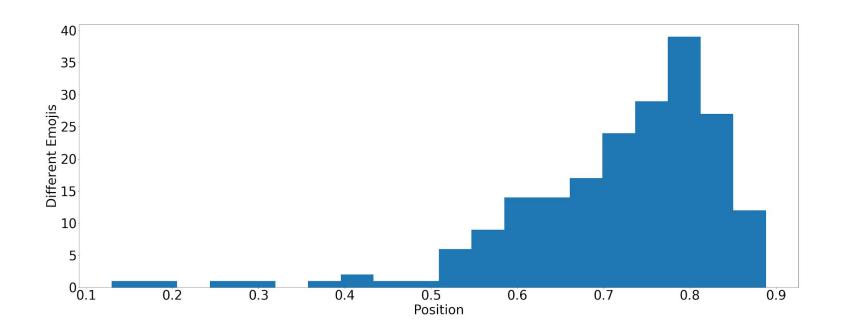


Difference in Sentiment of Writer vs. Reader

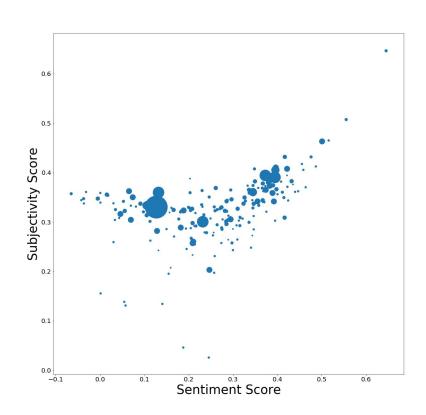


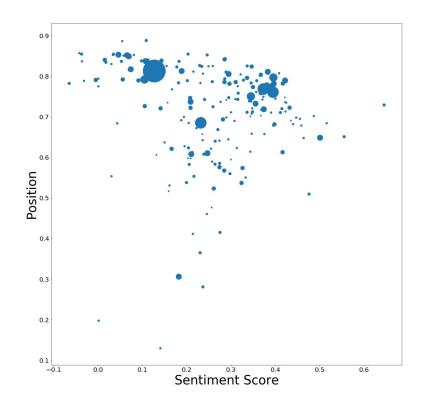


Position



Correlation with Sentiment Score





Influence & Importance



- Marketing
- Public Relations
- Involvement & Connection





TOP 5 Emojis

Most popular emojis:











Highest sentiment score:









Lowest sentiment score:





















Lowest sentiment variance:

Highest sentiment variance:











Highest sentiment difference:











Lowest sentiment difference:

Highest subjectivity:

Highest objectivity:























Thank You 3







Dataset

Dataset:

The original files for this dataset was four archives from ArchiveTeam TwitterStream project. We reformatted these files, selected all the english-language tweets with at least one emoji.

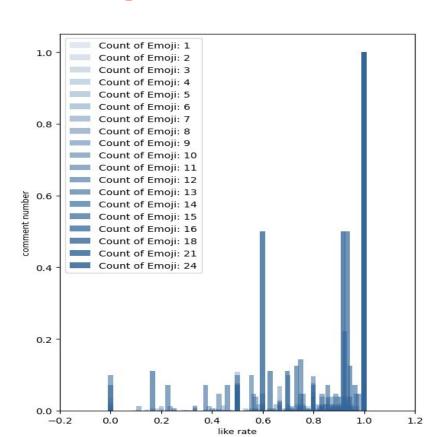
https://www.kaggle.com/rexhaif/emojifydata-en

Sentiment analysis:

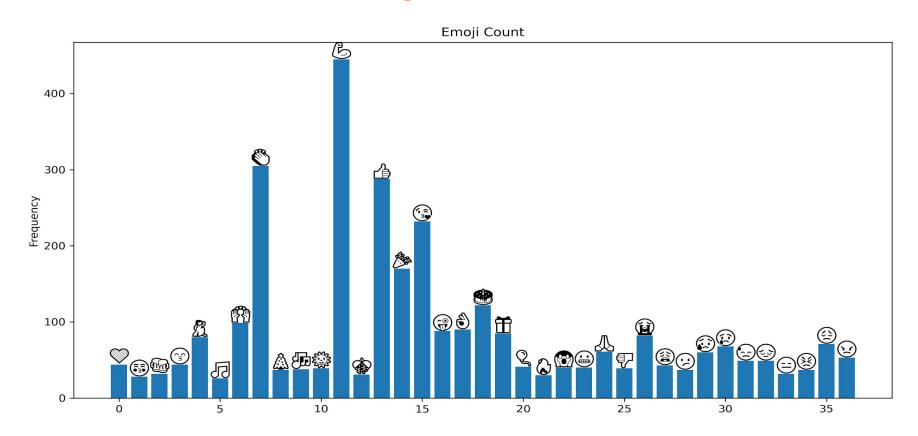
TextBlob aims to provide access to common text-processing operations through a familiar interface. You can treat **TextBlob** objects as if they were Python strings that learned how to do Natural Language Processing.

https://textblob.readthedocs.io/en/dev/quickstart.html

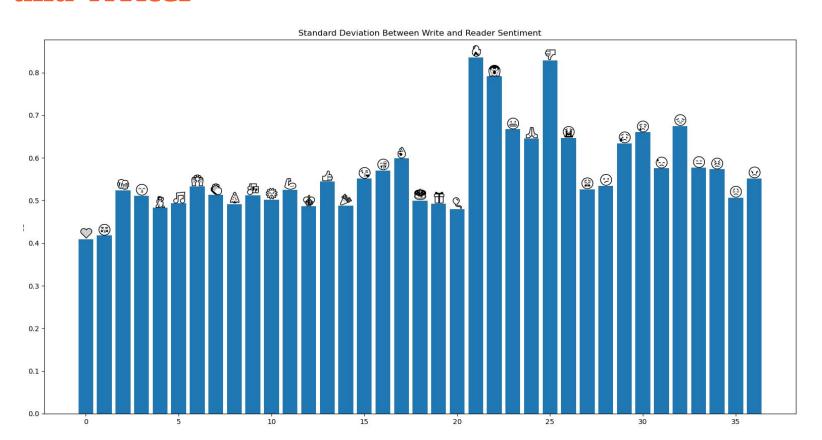
Number of Emoji VS Like Rate



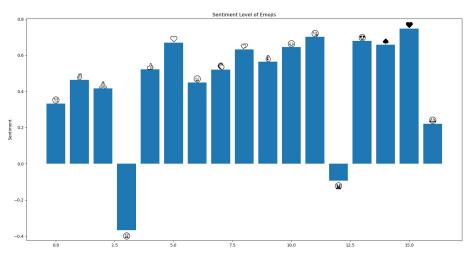
Frequency of Emoji Use



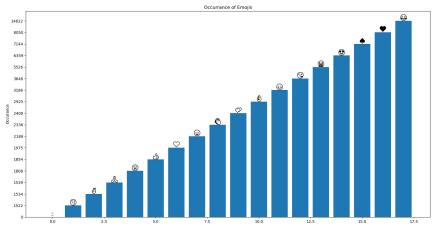
Standard Deviation in Sentiment Between Reader and Writer



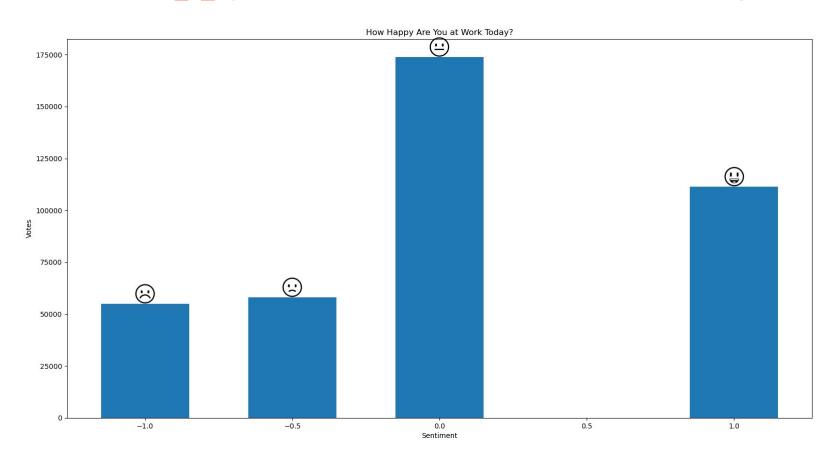
Sentiment Level of Emojis



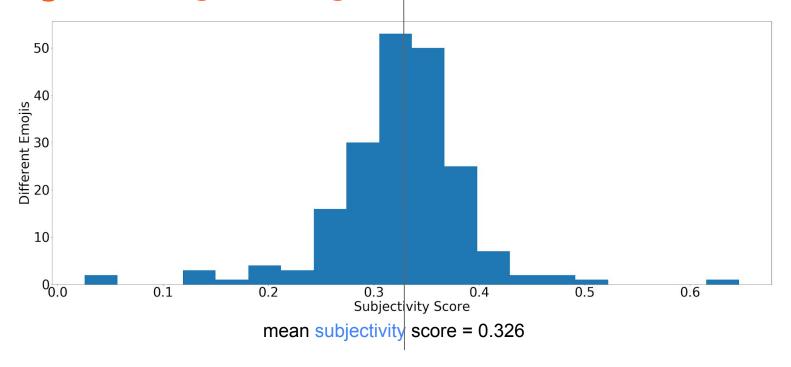
Frequency of Emojis



How Happy Are You at Work Today?

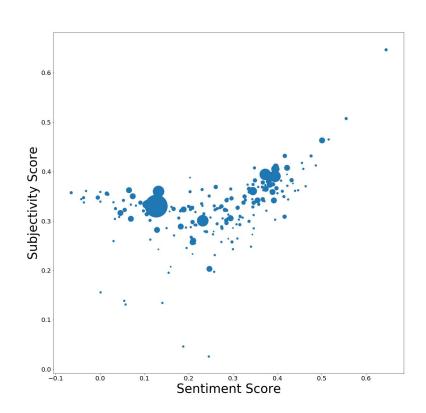


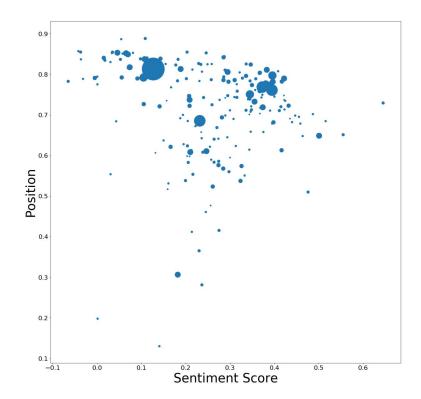
Subjectivity Analysis



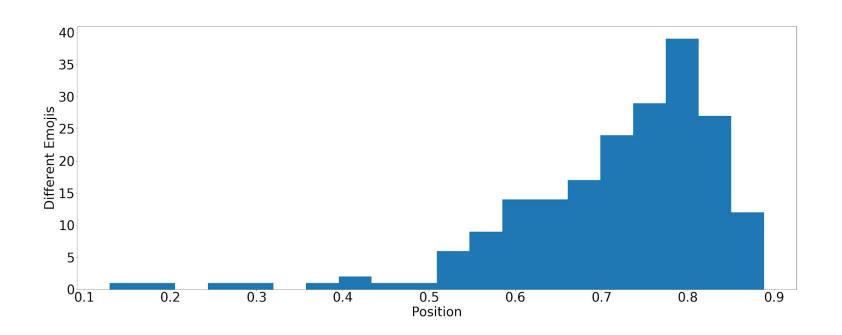
The subjectivity is a float within the range [0.0, 1.0] where 0.0 is very objective and 1.0 is very subjective.

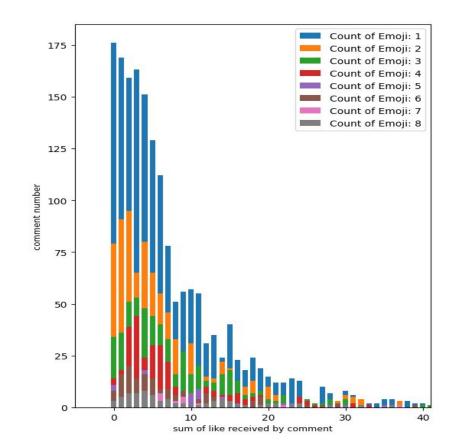
Correlation



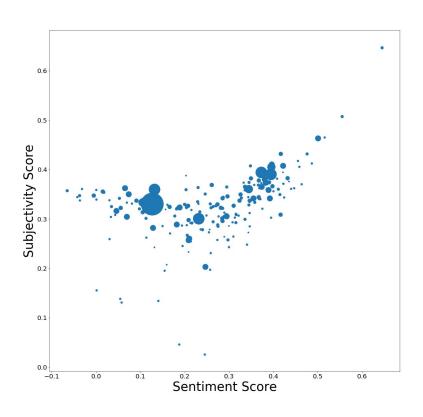


Position

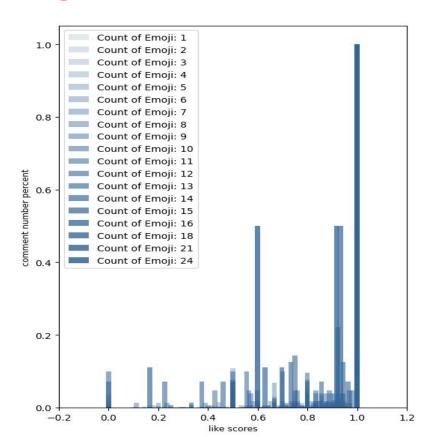




Sentiment Score VS Subjectivity



Number of Emoji VS Like Rate



How Happy Are You at Work Today?

