Twitter EmotiMap

# Abstract

Today, we find that a large portion is human interaction is centered in social computing. As society moves away from pen and paper and toward the internet to express thought, the field of computer science finds itself confronted with an assortment of social and psychological data and trends at its disposal. In the following project, we will attempt to harness the enormous stream of Twitter statuses, known as “tweets,” in order to analyze the mood demonstrated by a population. Furthermore, we will group these trends in accordance with their geographical attributes when possible so that a regional mood analysis may also be shown.

# Introduction

In the ensuing project, a variety of APIs will be utilized in order to collect, filter, and display Twitter data. First and foremost, we must address the Twitter fire hose, which shall be used in order to collect live Tweets. Initially, tweets will be filtered so that only those with tweet content in English and geolocation data readily available in their metadata will be collected for analysis. After this is solidified, we may expand our geolocation criteria so that, if the geolocation data is not in the tweet’s metadata, the user’s profile will be parsed, if possible, and their profile location will be used as a proxy. Additionally, as we expand our dictionary database, we may also incorporate languages other than English for which to propagate key emotional words.

Once, tweets are collected, we will analyze the textual content of each tweet for a variety of key emotional words. A data set of “emotion words” will be drawn up for which to be used in an analysis against each tweet’s content. These emotion words will be assigned a numerical quantity which scales to a certain emotion. All emotional words hashed from a tweet will then be averaged together to achieve a composite emotional score for that tweet. The scale to be used as well as mathematical processes associated with this data matching will be further expounded upon in the *Methodology* section of this report.

Next, based upon the collected geolocation data for each tweet, the data will be displayed

# Methodology

To take advantage of this template’s design, use the Styles gallery on the Home tab. You can format your headings by using heading styles, or highlight important text using other styles, like Emphasis and Intense Quote. These styles come in formatted to look great and work together to help communicate your ideas.

Go ahead and get started.

# Results

To take advantage of this template’s design, use the Styles gallery on the Home tab. You can format your headings by using heading styles, or highlight important text using other styles, like Emphasis and Intense Quote. These styles come in formatted to look great and work together to help communicate your ideas.

Go ahead and get started.

# Analysis

To take advantage of this template’s design, use the Styles gallery on the Home tab. You can format your headings by using heading styles, or highlight important text using other styles, like Emphasis and Intense Quote. These styles come in formatted to look great and work together to help communicate your ideas.

Go ahead and get started.

# Conclusion

To take advantage of this template’s design, use the Styles gallery on the Home tab. You can format your headings by using heading styles, or highlight important text using other styles, like Emphasis and Intense Quote. These styles come in formatted to look great and work together to help communicate your ideas.

Go ahead and get started.

# References

Google Python Twitter Library - <https://code.google.com/p/python-twitter/>

Twitter API (Tweets) - <https://dev.twitter.com/docs/platform-objects/tweets>

# Appendix

To take advantage of this template’s design, use the Styles gallery on the Home tab. You can format your headings by using heading styles, or highlight important text using other styles, like Emphasis and Intense Quote. These styles come in formatted to look great and work together to help communicate your ideas.

Go ahead and get started.