**Brand Reputation Calculator**

Online Social Network Analysis – Final project

Jiranun Jiratrakanvong – A20337992

Miguel Menendez Alvarez – A20363536

# Introduction

What did you do and **why**? What are the research questions of your analysis? What is your hypothesis?

The Social Networks are very important for the brands nowadays, it is well-known how a little mistake can cause a huge repercussion and be spread all over the internet. In this situation, a good control of the content that people is generating about you, a brand, can give you the opportunity to face the issue before it gets out of control.

So, this paper develops an idea of how all this information could be treated to be easily interpreted and useful. For this, the data collected from Twitter is analyze using sentiment analysis in order to obtain a reputation score of this brand. This reputation could be general, so it gives an approximation of the main opinion in this moment; or located, so it gives a more located approach of this main opinion.

Another question is how accurate this approach could be against the real social media events and if the located computation gives an advantage in this data interpretation.

# Data

What data did you collect and how?

The first step is controlled by the user, who will introduce the brand name to analyze and the type of analysis: by city or general.

Once this input is introduced, the program will collect at least 100 tweets to compute the reputation for each city or the general reputation. This number is the limit of one Twitter response but could be increased changing the required number of tweets in the *get\_tweets\_by\_location()* module. It is ready to afford bigger queries using the last tweet ID of the previous request to ask for the next bunch of tweets from this ID with the *since\_id* parameter.

For the location tweets request, it is used the Geopy library which respond with a detailed information of a place given a description such us a city name. The coordinates obtained are used to search tweets in a 20 mile radius of the city center using the *geocode* parameter of the Twitter Search API.

# Methods

What did you do with the data, precisely?

[Sentiment Analysis]

After the reputation calculation, the different scores and the most used hashtags for each city, or just the general, are process by the *score display* module. This module shows the numerical reputation score and a bubble chart where the size of the bubbles is proportional to the appearances of the hashtag.

If the user selects several cities, it will show a map with the scores represented as color bubbles over each city location. The color of the bubble represents how good the score is going from red to green in a 5 colors scale. The user can also stand over the bubble to see the exact value an city name.

# Experiments

These should answer your research questions and test your hypotheses.

# Related work

How have others approached this problem? What makes your approach different?

# Conclusions and future work

What should we have learned from reading your paper? What's left to do?