

CS 410 - JAWs Project Progress Report

Sentiment Analysis of Customer Support Tweets

1) Which tasks have been completed?

- Replacing emojis with descriptions of emojis
- General data cleaning to remove urls, unnecessary line endings, etc
- Running topic analysis on Amazon, Apple, and Uber Tweets
- Creating a parallel database that links all the tweets in the same thread.
- Sentiment analysis of the first and last user tweet of each thread to determine change in sentiment due to the interaction with the customer service team
- Summarize the average initial sentiment of the customer, and the average improvement of sentiment by company.
- Visualize how the sentiment changes over time for one company.

2) Which tasks are pending?

- Sentiment analysis between successive customer tweets of a thread
 - Generating a language model representing “successful” customer service tweets
- Visualizing/Summarizing data
- Continue topic analysis on airline companies trying different topic counts
- Incorporating topic analysis into sentiment analysis of companies
- Visualize how the company compares to others in the same industry regarding the effectiveness of their team in improving customer sentiment.

3) Are you facing any challenges?

- General runtime of scripts
- Choosing what parts of our analyses are most interesting to summarize and present
- Finding coherent topics of tweets programmatically