Twitter Sentiment Analysis of Ukrainian Refugees

By Tianqi Zhao and Stone McLaren Rensselaer Polytechnic Institute

Table of Content

- ▶ 1. Introduction
- ▶ 2. Methods
- ▶ 3. Visualization/Results
- ▶ 4. Future Work

Introduction

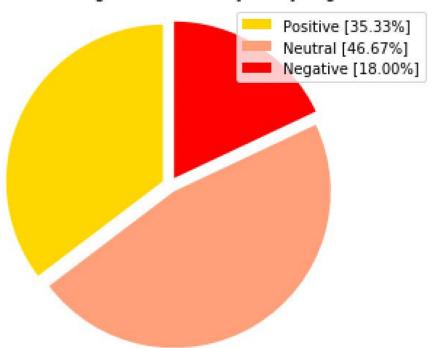
▶ Ukraine Humanitarian/Refugee Crisis has become a world-class spot recently. In this project, we did sentiment analysis about 900 Tweets from Twitter about people's views of Ukrainian Crisis. And we also created a classifier using 90% of the Tweets, then test it on 90 Tweets to get the Confusion Matrix.

Methods

- ▶ 1. Use Tweepy to get 900 Tweets about people's view of Ukrainian Crisis.
- 2. Data Cleaning (Use Porter Stemmer and Text Blob).
- 3. Use Bag of Words to do vectorization.
- 4. Do statistics about people's view of Ukrainian Crisis (Positive, Negative, Neutral).
- ▶ 5. Use Random Forest algorithm to train the classifier.
- 6. Test and get Confusion Matrix.

Results - Statistics (Pie Chart)

How people are reacting on #ukraine by analyzing 900 Tweets.



Results - Confusion Matrix

	Positive (Predict)	Neutral (Predict)	Negative (Predict)
Positive (True)	5	10	0
Neutral (True)	0	52	0
Negative (True)	0	10	13

Future Work

- ▶ 1. We would use Industrial-Level libraries to crawl more Tweets for training and testing.
- ▶ 2. We would use Industrial-Level libraries to crawl more Tweets for training and testing.