

The background features abstract, overlapping green geometric shapes, primarily triangles and polygons, in various shades of green, creating a modern and dynamic visual effect.

Twitter Sentiment Analysis of Ukrainian Refugees

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Introduction

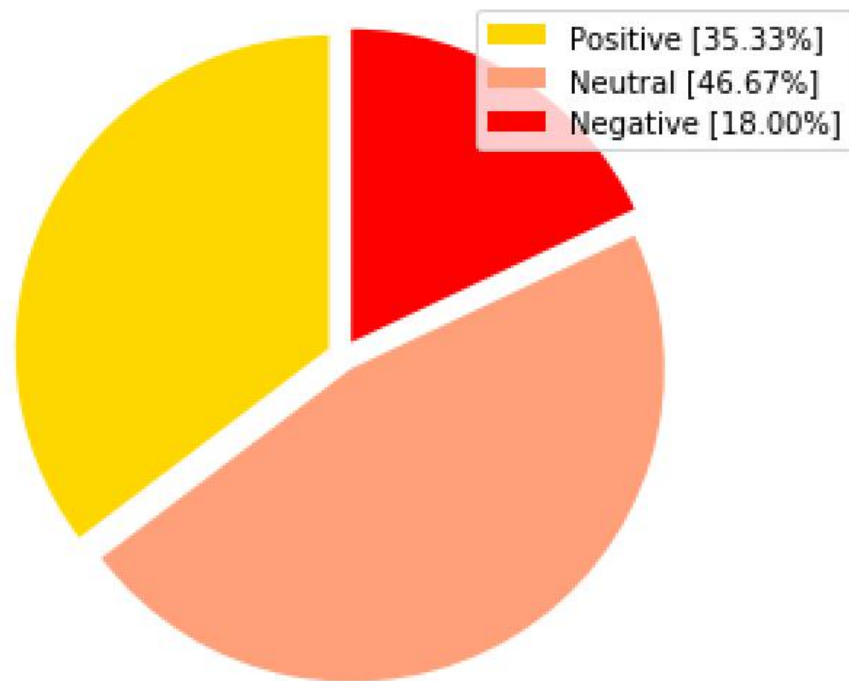
- ▶ Ukraine Humanitarian/Refugee Crisis has become a world-class spot recently. In this project, we did sentiment analysis about 900 Tweets from Twitter about people's views of Ukrainian Crisis. And we also created a classifier using 90% of the Tweets, then test it on 90 Tweets to get the Confusion Matrix.

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 self-implemented Multilayer Neural Networks to do the training and testing to get more accurate results.