Twitter Sentiment Analysis on Tech Brands

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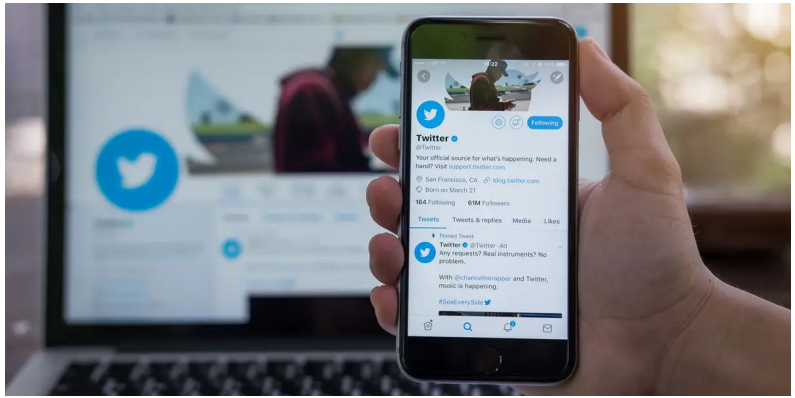
Overview

- Usage of language processing and machine learning algorithms to predict sentiment of Twitter posts based on their content
  - Proof of concept modeling



Outline

- Business Problem
- Data
- Analysis and Results
- Next Steps

Business Problem

- Sentiment analysis can be used to process customer feedback
- Benefits of sentiment analysis:
  - Efficient and quick way to process huge amounts of data
  - Real-time analysis of customer issues
  - Consistent criteria to sort review data with
- Goal: make informed decisions to increase customer satisfaction, improve products and services

Data

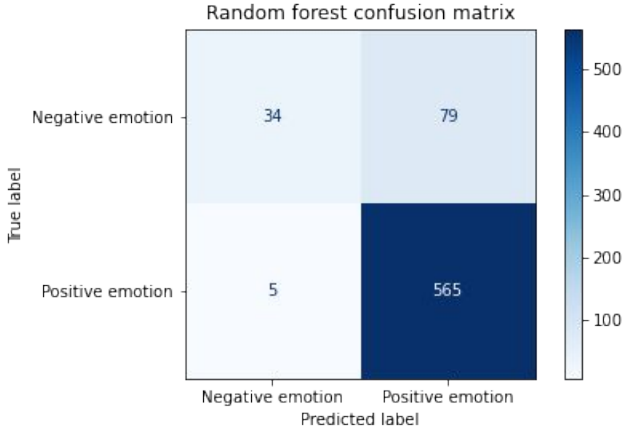
- Twitter posts (tweets) about Apple and Google products
  - Human raters were asked to rate tweets as “positive”, “negative”, or no emotion
- More positive tweets than negative

Negative emotion

Positive emotion

Analysis and Results

- Best model performed well with ~87% accuracy
- Can be used as foundation to create bigger sentiment analysis system
    - Potentially add more data from Twitter, customer surveys, etc. that isn't already labeled for us



Next Steps

- Compare positive and negative tweets expressed between Apple and Google products
- Investigate tweets labeled “I can’t tell” in dataset
- Find more Twitter data to train model with
- Create model that can label/predict tweets directly from Twitter?

Thank you!

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