Predicting Stock Movements with Natural Language Processing and Twitter

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FLATIRON SCHOOL FINAL PROJECT

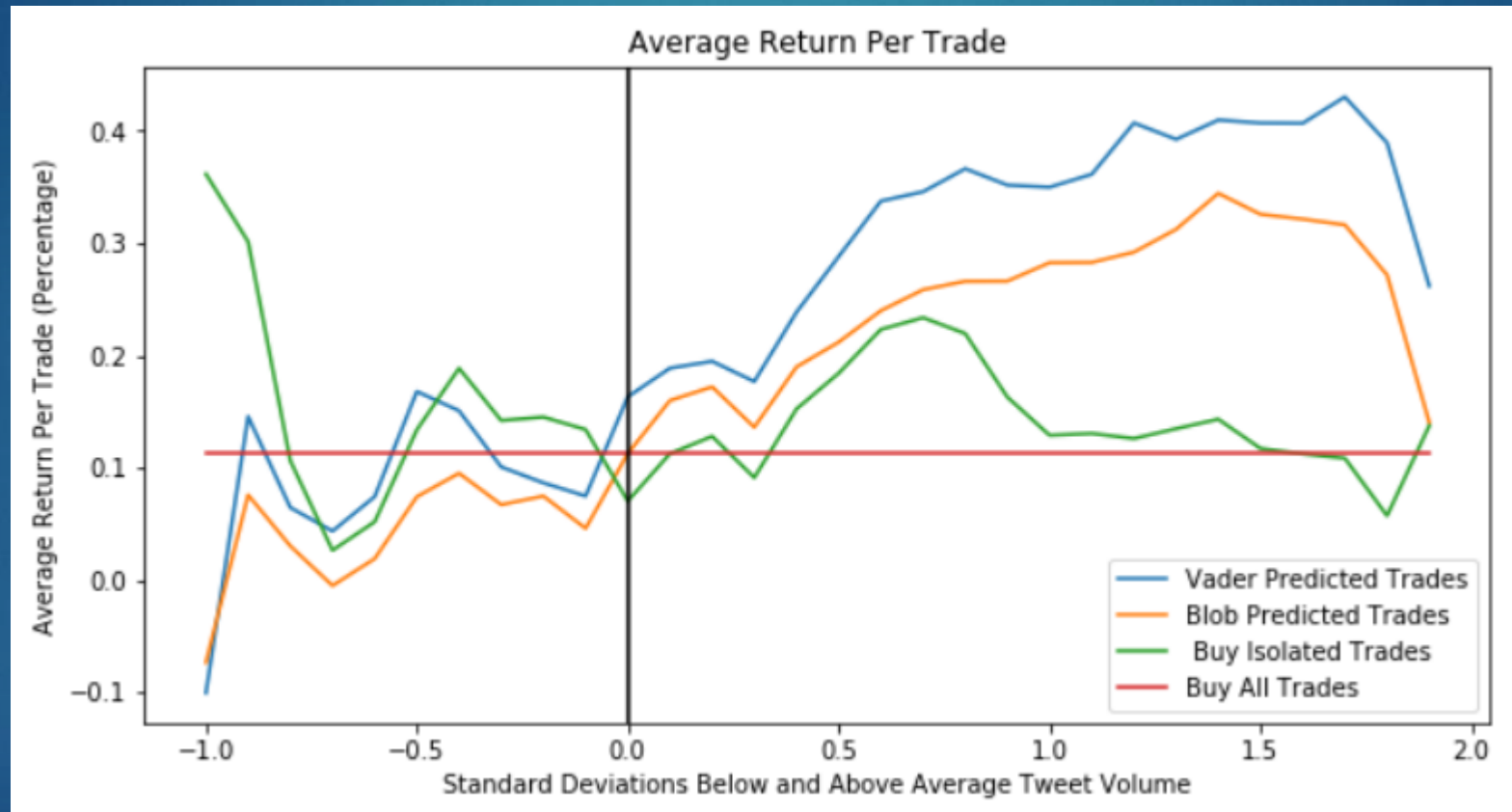# Methodology
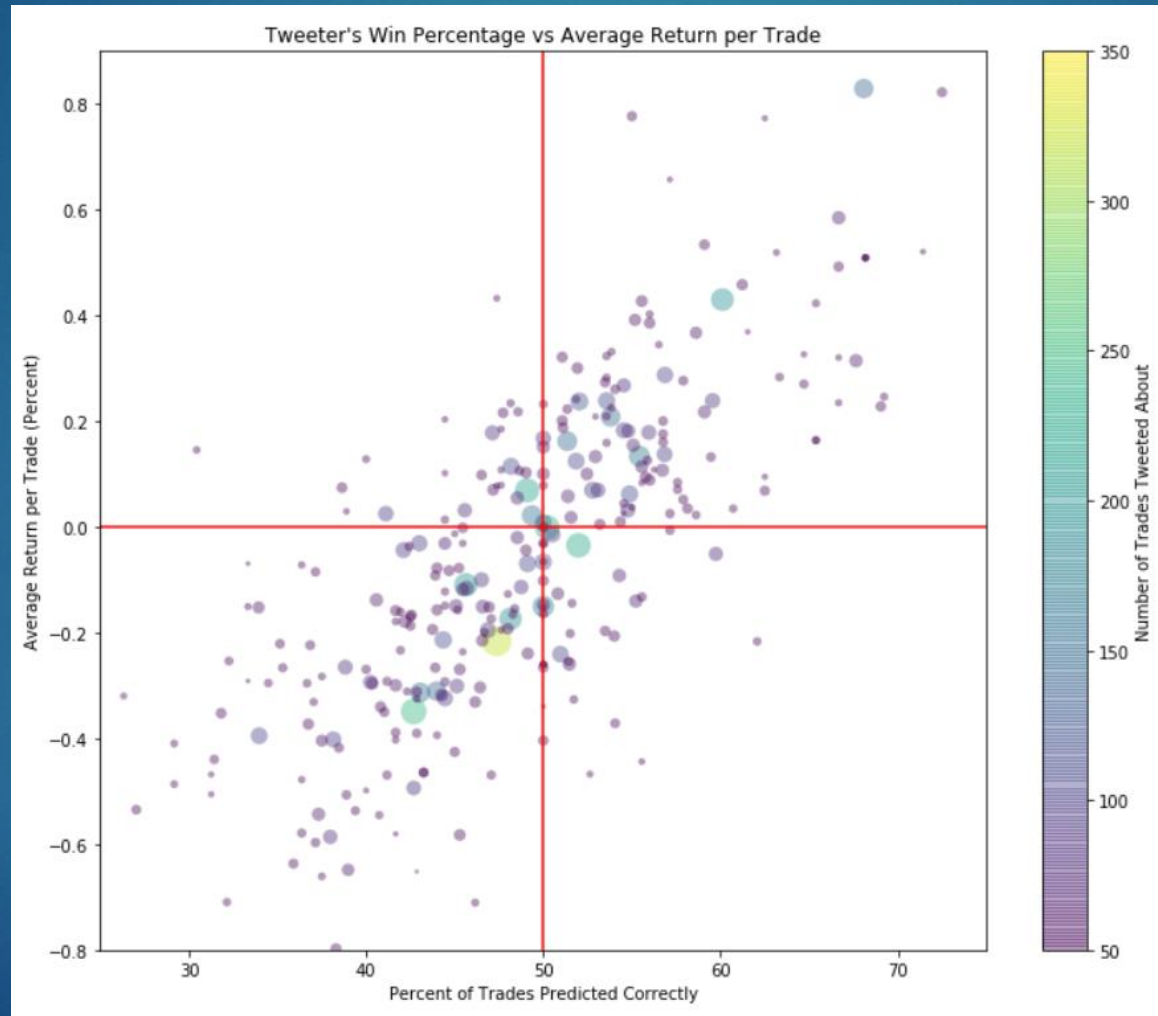
- ⚙️ Gather Data
- 🔍 Analyze Sentiment
- 📅 Make Predictions

Findings:
Abnormally high Tweet volume leads to improved trading results
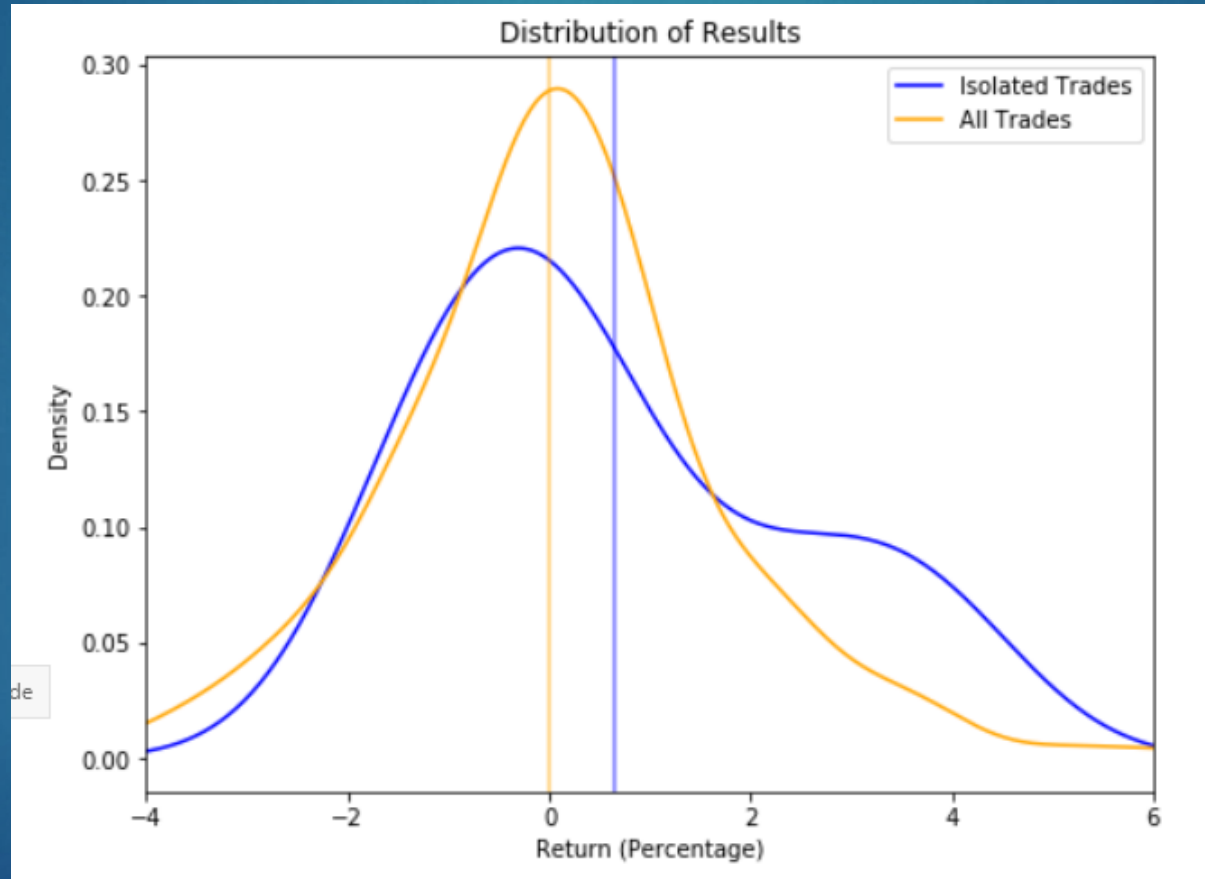
Findings:
Some tweeters are better predictors than others

Tweeter's Win Percentage vs Average Return per Trade

Findings:
Isolating accurate tweeters can give useful predictions

Conclusions:

- Natural Language Processing on stock market related tweets can provide useful insight into future stock movement

- In general, the VADER algorithm outperformed the TextBlob algorithm

- These techniques should not be used in real money trading because the data was mostly over three years old and did not contain examples from all market conditions

Future Work:

► Purchase a Twitter Developer license to be able to run the same process for more recent data

► Perform the same analysis on a wider array of stocks

► Employ other sentiment analysis algorithms such as the one created by Google