

Model Performance

Model Name: ScoreClassificationV15 Test Date: 17/03/2022 19:21:30 Creator: Tobias Rothlin



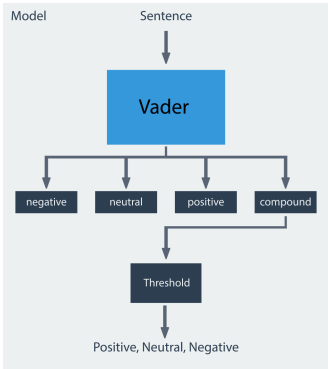
Overview

ML Principle:
Vader Sentiment Analysis

References:

- [Vader overview](#)
- [Vader github](#)

Algorithm Description:
Vader (Valence Aware Dictionary for sEntiment Reasoning) is a pre trained model used for sentiment analysis. Vader is a lexicon and rule-based sentiment analysis tool that is specifically attuned to sentiments expressed in social media. The backbone of Vader is a dictionary that maps lexical features to emotion intensities (sentiment score). To receive the sentiment score of a sentence the intensities of each word are added. For example, words like 'love', 'enjoy' indicating a positive sentiment. Vader is smart enough to understand basic context like 'did not love' as negative. Further it has a basic understanding of capitalization and punctuation to emphasis tone. Due to this any preprocessing steps should not be done.



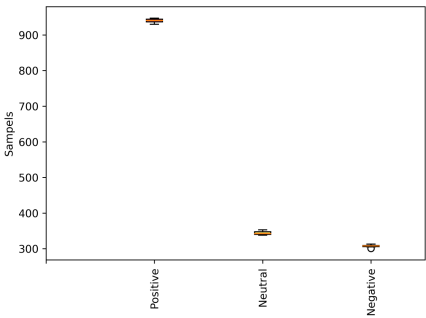
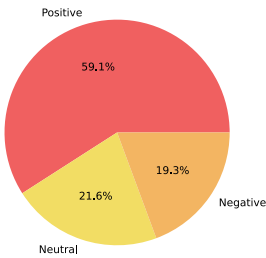
Classification Pipeline

Metrics

Data: ClassifiedDataSetV1.2 with 10 folds cross validation
Split seed: 60.796016

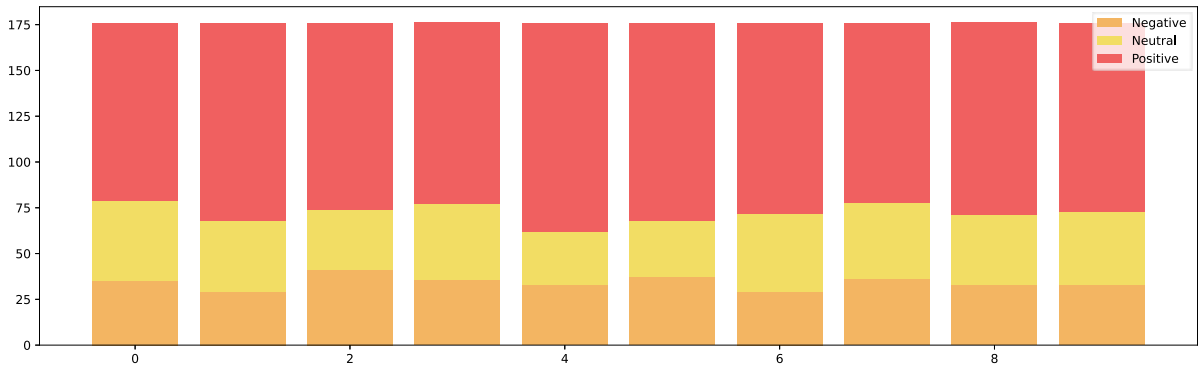
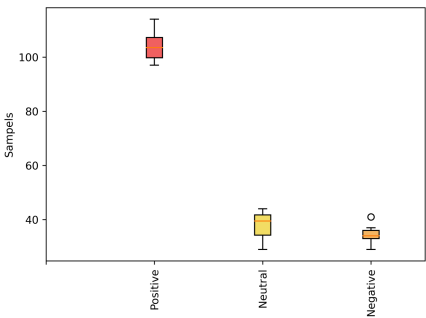
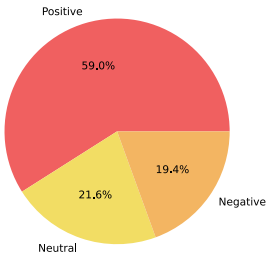
Training Dataset

Classes	Number of samples
Positive	940
Neutral	344
Negative	307



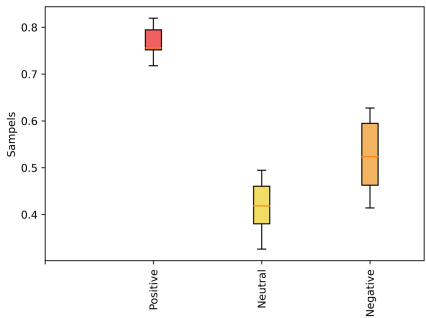
Test Dataset

Classes	Number of samples
Positive	103
Neutral	38
Negative	34

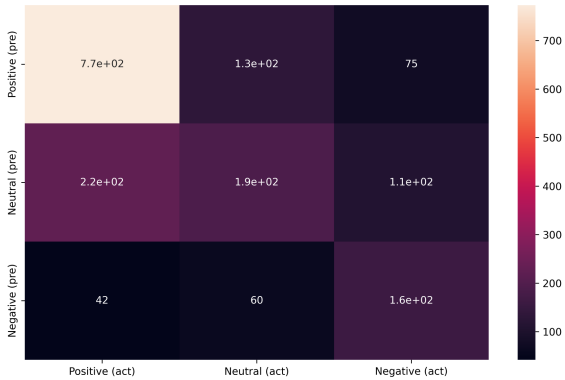


Classification Performance

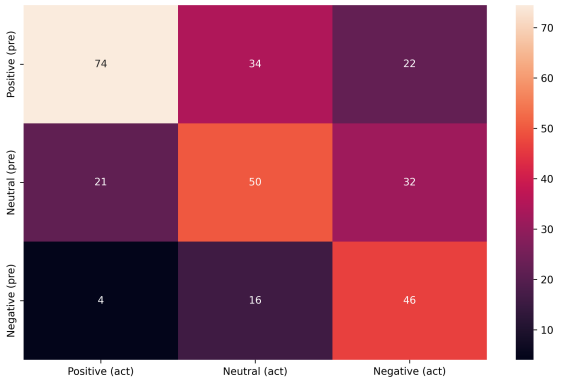
Classes	Precision	Recall	F1 Score
Positive	78.96%	74.47%	76.65%
Neutral	36.35%	49.74%	42.00%
Negative	60.92%	46.49%	52.74%
Accuracy			63.69%
Macro Average	58.74%	56.90%	57.13%
Weighted Average	66.25%	63.69%	64.52%



ConfusionMatrix:



Normalised ConfusionMatrix:



F1 Socre by split:

