

Sentiment Analysis Report (5000 Sampled Entries)

Overview:

This report presents an automatic sentiment classification of text data using a RoBERTa model trained on Twitter posts. The sentiments are categorized into three primary classes:

- Positive: Represents favorable, optimistic, or happy language. In product reviews, this may indicate satisfaction or endorsement.
- Neutral: Represents factual or objective language with no strong emotional leaning. It may reflect reporting, ambiguity, or undecided opinions.
- Negative: Represents dissatisfaction, complaints, or emotionally negative statements like frustration or disagreement.

Analysis Summary:

- Positive: 1739
- Neutral: 1252
- Negative: 2009

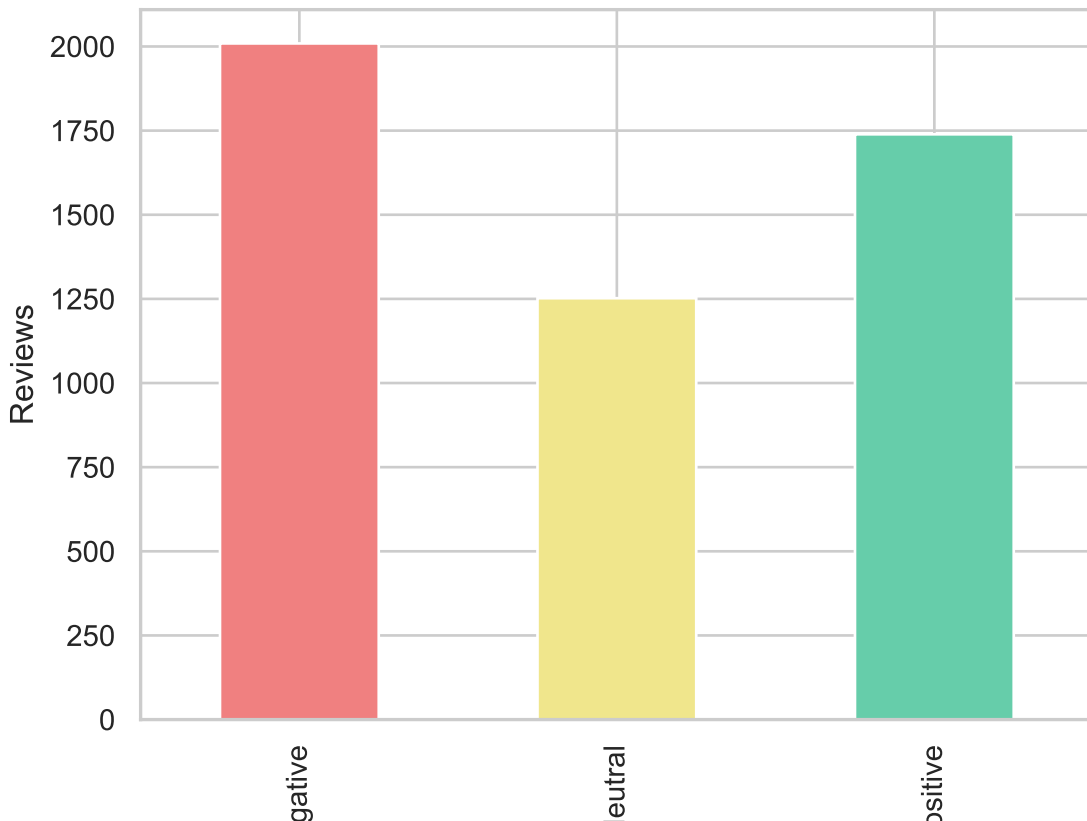
Confidence:

- Average prediction confidence: 0.79
- High-confidence predictions (> 0.9): 1804

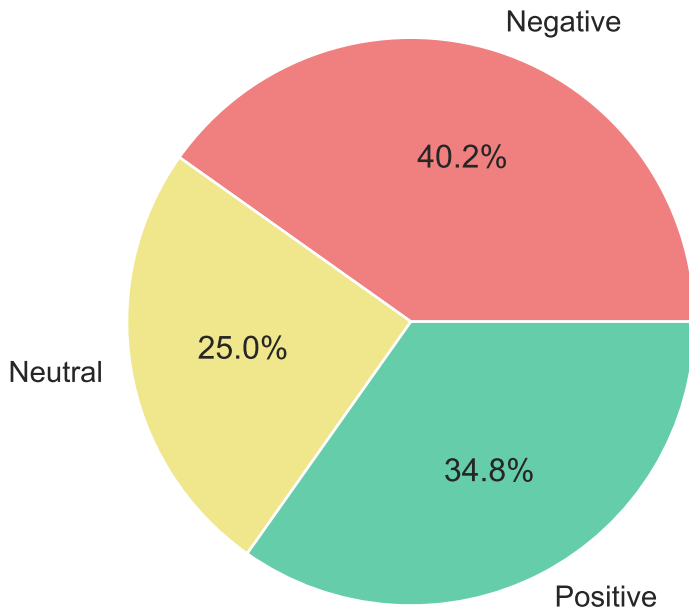
Observations:

- The sentiment distribution shows a dominant trend toward 'Negative'.
- The word clouds highlight common terms within each sentiment class.
- Confidence remains consistently high, indicating strong prediction reliability.

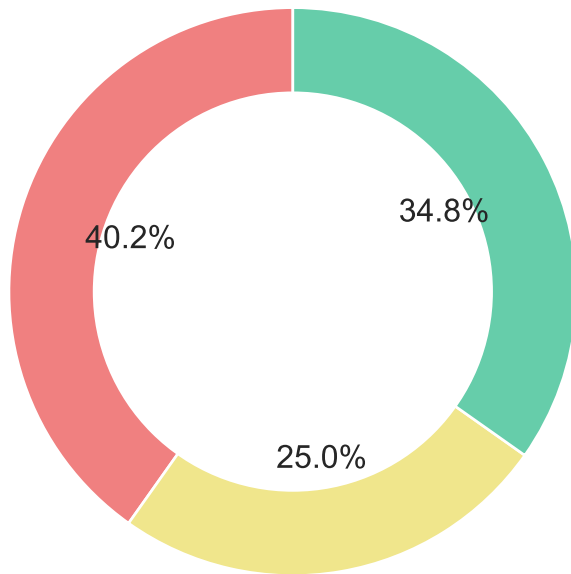
Sentiment Count



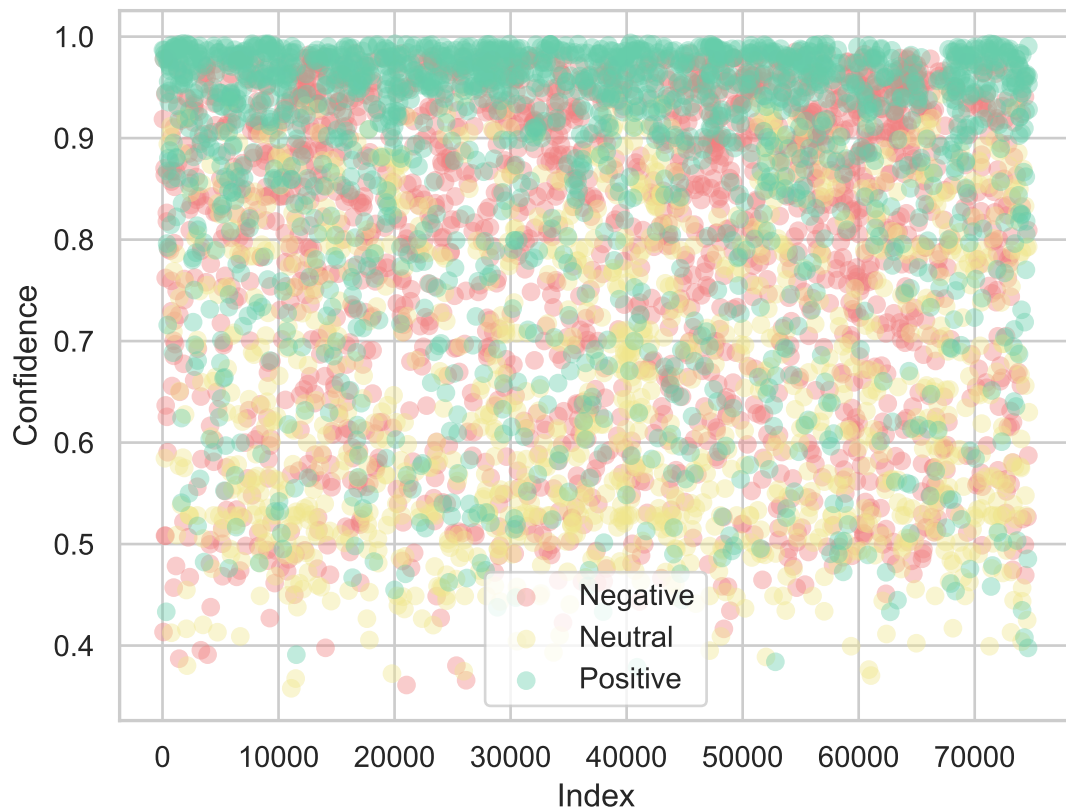
Sentiment Proportion



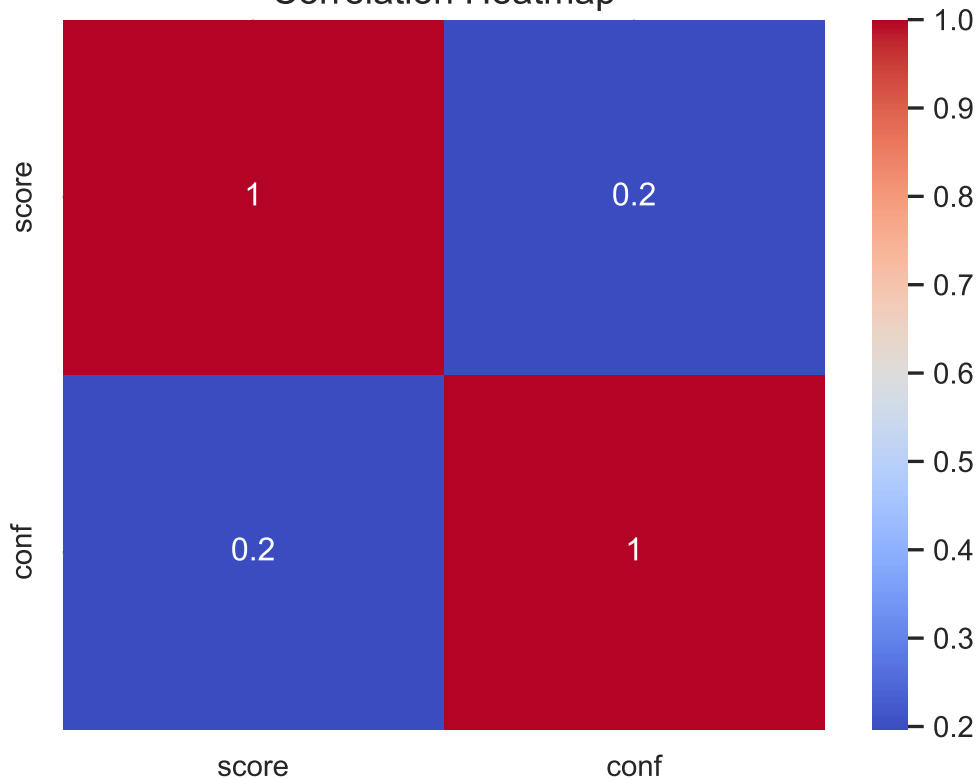
Sentiment Donut Chart



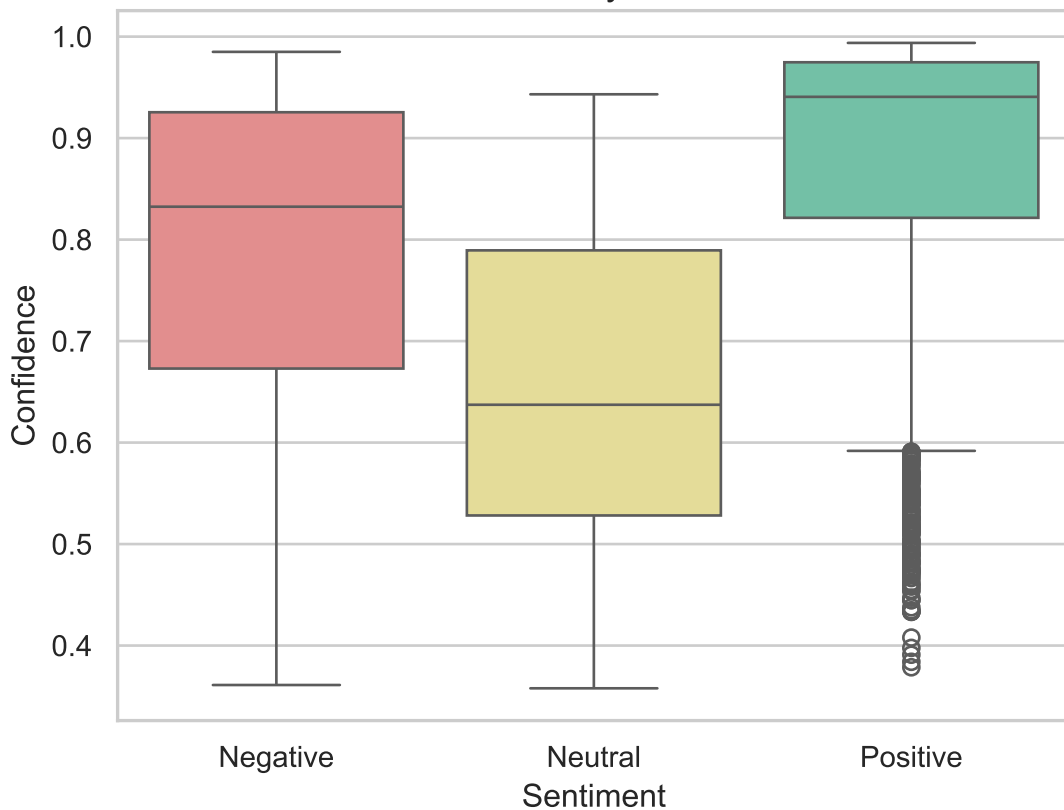
Confidence Scatter Plot



Correlation Heatmap



Confidence by Sentiment



Sentiment Over Chunks (500 rows each)

