

Stock Market Sentiment Analysis using Machine Learning

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Abstract: *Predicting and analyzing stock market prices has been a topic of interest among both analysts and researchers for a long time. The high volatility of stock prices, which is influenced by a variety of political and economic factors, a change in leadership, investor sentiment, and many other factors, makes them difficult to predict. Hence, predicting and analyzing stock prices based on either historical data or textual information alone has proven to be insufficient. Existing studies in sentiment analysis have found that there is a strong correlation between the movement of stock prices and the publication of news articles and social media. For this reason, public opinion is considered a useful resource for precise market predictions. The stock market forecasters concentrate on creating an effective strategy to forecast stock prices. In addition to achieving the greatest results, the key to successful stock market forecasting is reducing the number of wrong price predictions. In this project, we apply sentiment analysis and machine learning principles to news headlines to direct stock market investment.*

Keywords: Forecasting, sentiment analysis, machine learning.

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