

Stock Price Prediction using Technical Analysis

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Abstract: Investors must have access to timely, accurate information in order to trade stocks effectively. Since many companies are traded on a stock exchange, a variety of factors affect the choice. In addition, it is difficult to foresee how stock prices will behave. The technique of predicting stock prices is crucial and difficult for the reasons mentioned above. Finding the predictive model with the lowest error rate and highest accuracy thus becomes a study topic. This work is our suggestion for solving the issue. In this work, we develop a model based on technical analysis which used Long Short-Term Memory (LSTM) algorithm to forecast the stock price of a company for the next 30 days. We collect historical stock data from the Yahoo Finance API using the yfinance library in Python and preprocess it using MinMaxScaler. In addition to the model development, we have created a web application. This application allows users to input the stock symbol of a company and get the predicted stock price for the next 30 days. The predicted values are displayed using a line chart, which provides users with a visual representation of the predicted stock price. Overall, this work provides an effective and accurate way of predicting the stock value of a company, which can be beneficial for investors in making informed decisions. The web application provides a user-friendly interface, making it easily accessible to anyone interested in predicting the stock price of a company.

Keywords: Stock Price, Technical Analysis, Long ShortTerm Memory, Web Application

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