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# Stock Price Prediction Model Using Machine Learning

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***Abstract:*** *Researchers have studied various methods to effectively predict stock market prices. A useful forecasting system allows traders to gain better insight into data such as future trends. In addition, the analysis reflects future market conditions, which is of great benefit to investors. One of these methods is using machine learning algorithms for prediction. The goal of this project is to improve the quality of stock market results predicted from stock values. Many researchers have found different ways to solve this problem. So far, mainly traditional methods and so on. An artificial neural network for discovering hidden patterns and classifying data used for stock market predictions. This project proposes another method of predicting stock market prices. Data are not fitted to a specific model. Rather, we use machine learning architectures to identify potential dynamics that exist within the data. This study uses a Long Short-Term Memory (LSTM) machine learning architecture for price prediction and performance differentiation of NSE-listed firms. In the long run, a sling window approach was applied and performance was evaluated using the root mean square.*

***Keywords:*** Artificial Neural Network, RNN, Datasets, LSTM.

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