

Technical Report Writing

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Topic: Stock Market Price Prediction using Machine Learning

Literature Review:

In [1], Aditya Gupta and Bhuwan Dhingra utilised a Hidden Markov Model to forecast the following day's close price of stocks. They utilised historical stock prices from firms like Apple Inc., IBM Corporation, TATA Steel, and Dell Inc. to make their calculations. High Price, Low Price, Open Price, and Close Price were the inputs. Each stock's model was meant to be independent of the others. The model was first trained for seven months. MAPE values were used to test the model.

Authors utilized an SVM-based technique to forecast the price of stock market changes in [2]. They divided the challenge into two parts: feature selection and market trend prediction. The SVM correlation was used to determine the features that have the greatest impact on the price. To predict the direction, linear SVM is applied to the data series. They demonstrated that the algorithm can select the best feature and control overfitting when predicting stock market trends. Lin et al. employed an SVM-based technique to forecast the price of stock market changes in [2].

Reference:

[1] Lin, Y., Guo, H., & Hu, J. (2013). An SVM-based approach for stock market trend prediction. In Neural Networks (IJCNN), The 2013 International Joint Conference on (pp. 1–7). IEEE.

[2] Gupta, A., & Dhingra, B. (2012). Stock market prediction using hidden markov models. In Engineering and Systems (SCES), 2012 Students Conference on (pp. 1–4). IEEE.