

Predicting Stock Using Research and Value

Pragati Gadhav¹, Rushikesh Karne², Saideep Pawar³,

Vaibhaw Sonawane⁴, Prof. Ajay . T. Sonawane⁵

Students, Department of Information Technology^{1,2,3,4}

Professor, Department of Information Technology⁵

SKN Sinhgad Institute of Technology & Science, Lonavala, Maharashtra, India

Abstract: *Investment firms, hedge funds and even individuals have been using financial models to understand market behavior better and make profitable investments and trades. Can we predict stock prices with machine learning? Investors make educated guesses by analyzing data. They will read the news, study the company history, industry trends, and other data points that go into making a prediction. The prevailing theories are that stock prices are totally random and unpredictable, raising the question of why top firms like Morgan Stanley and Citigroup hire quantitative analysts to build predictive models. We have this idea of the trading floor being filled with adrenaline infused men with loose ties running around yelling something into a phone. However, these days we are more likely to see rows of machine learning experts quietly sitting in front of computer screens. About 70% of all orders on Wall Street are now placed by software. We are now living in the age of algorithms.*

Keywords: Algorithm, Deep learning, Finance, LSTM, Price action, python, Stock

REFERENCES

- [1]. Mehtab, S. (2020, September 20). Stock Price Prediction Using Machine Learning and LSTM-Based Deep Learning Models. ArXiv.Org. <https://arxiv.org/abs/2009.10819>
- [2]. Chauhan, N. S. (2020, January). Stock Market Forecasting Using Time Series Analysis. KDnuggets. <https://www.kdnuggets.com/2020/01/stock-market-forecasting-time-series-analysis.html>
- [3]. Dev, U. (2020, June 21). EDA of Stock Market using Time Series - Usharbudha Dev. Medium. <https://usharbudha-dev09.medium.com/eda-of-stock-market-using-time-series-9662fd18bfc5>
- [4]. Hyndman, Rob J., and George Athanasopoulos. Forecasting: principles and practice. OTexts, 2018.
- [5]. Kim, Taewook, and Ha Young Kim. "Forecasting stock prices with a feature fusion LSTM-CNN model using different representations of the same data." PloS one 14.2 (2019).
- [6]. Kingma, Diederik P., and Jimmy Ba. "Adam: A method for stochastic optimization." arXiv preprint arXiv:1412.6980 (2014).
- [7]. Li, Hao, Yanyan Shen, and Yanmin Zhu. "Stock price prediction using attention-based multi-input LSTM." Asian Conference on Machine Learning. 2018.
- [8]. Liu, Jialin, et al. "Stock Prices Prediction using Deep Learning Models." arXiv preprint arXiv:1909.12227 (2019).