

REFERENCE

- [1] M. Vijh, D. Chandola, V. A. Tikkiwal, and A. Kumar, “Stock Closing Price Prediction using Machine Learning Techniques,” *Procedia Comput. Sci.*, vol. 167, no. 2019, pp. 599–606, 2020, doi: 10.1016/j.procs.2020.03.326.
- [2] W. Jiang, “Applications of deep learning in stock market prediction: Recent progress,” *Expert Syst. Appl.*, vol. 184, no. March 2020, p. 115537, 2021, doi: 10.1016/j.eswa.2021.115537.
- [3] N. M. H. Masoud, “The impact of stock market performance upon economic growth,” *Int. J. Econ. Financ. Issues*, vol. 3, no. 4, pp. 788–798, 2013.
- [4] C. Chikwira and J. I. Mohammed, “The Impact of the Stock Market on Liquidity and Economic Growth: Evidence of Volatile Market,” *Economies*, vol. 11, no. 6, 2023, doi: 10.3390/economies11060155.
- [5] W. Khan, M. A. Ghazanfar, M. A. Azam, A. Karami, K. H. Alyoubi, and A. S. Alfakeeh, “Stock market prediction using machine learning classifiers and social media, news,” *J. Ambient Intell. Humaniz. Comput.*, vol. 13, no. 7, pp. 3433–3456, 2022, doi: 10.1007/s12652-020-01839-w.
- [6] X. Tang, N. Lei, M. Dong, and D. Ma, “Stock Price Prediction Based on Natural Language Processing1,” *Complexity*, vol. 2022, 2022, doi: 10.1155/2022/9031900.
- [7] J. Guo and B. Tuckfield, “News-based Machine Learning and Deep Learning Methods for Stock Prediction,” *J. Phys. Conf. Ser.*, vol. 1642, no. 1, pp. 0–7, 2020, doi: 10.1088/1742-6596/1642/1/012014.
- [8] T. T. Teoh *et al.*, “From Technical Analysis to Text Analytics: Stock and Index Prediction with GRU,” *Proc. IEEE 2019 9th Int. Conf. Cybern. Intell. Syst. Robot. Autom. Mechatronics, CIS RAM 2019*, pp. 496–500, 2019, doi: 10.1109/CIS-RAM47153.2019.9095772.
- [9] H. N. Bhandari, B. Rimal, N. R. Pokhrel, R. Rimal, K. R. Dahal, and R. K. C. Khatri, “Predicting stock market index using LSTM,” *Mach. Learn. with*

- Appl.*, vol. 9, no. May, p. 100320, 2022, doi: 10.1016/j.mlwa.2022.100320.
- [10] M. A. Istiake Sunny, M. M. S. Maswood, and A. G. Alharbi, “Deep Learning-Based Stock Price Prediction Using LSTM and Bi-Directional LSTM Model,” *2nd Nov. Intell. Lead. Emerg. Sci. Conf. NILES 2020*, pp. 87–92, 2020, doi: 10.1109/NILES50944.2020.9257950.
- [11] L. Xu, W. Xu, Q. Cui, M. Li, B. Luo, and Y. Tang, “Deep Heuristic Evolutionary Regression Model Based on the Fusion of BiGRU and BiLSTM,” *Cognit. Comput.*, pp. 1672–1686, 2023, doi: 10.1007/s12559-023-10135-6.
- [12] Y. Gao, R. Wang, and E. Zhou, “Stock Prediction Based on Optimized LSTM and GRU Models,” *Sci. Program.*, vol. 2021, 2021, doi: 10.1155/2021/4055281.
- [13] Q. Chen, W. Zhang, and Y. Lou, “Forecasting Stock Prices Using a Hybrid Deep Learning Model Integrating Attention Mechanism, Multi-Layer Perceptron, and Bidirectional Long-Short Term Memory Neural Network,” *IEEE Access*, vol. 8, pp. 117365–117376, 2020, doi: 10.1109/ACCESS.2020.3004284.
- [14] N. Malibari, I. Katib, and R. Mehmood, “Predicting Stock Closing Prices in Emerging Markets with Transformer Neural Networks: The Saudi Stock Exchange Case,” *Int. J. Adv. Comput. Sci. Appl.*, vol. 12, no. 12, pp. 876–886, 2021, doi: 10.14569/IJACSA.2021.01212106.
- [15] M. E. Karim and S. Ahmed, “A Deep Learning-Based Approach for Stock Price Prediction Using Bidirectional Gated Recurrent Unit and Bidirectional Long Short Term Memory Model,” *2021 2nd Glob. Conf. Adv. Technol. GCAT 2021*, no. November, 2021, doi: 10.1109/GCAT52182.2021.9587895.
- [16] M. A. Hossain, R. Karim, R. Thulasiram, N. D. B. Bruce, and Y. Wang, “Hybrid Deep Learning Model for Stock Price Prediction,” *Proc. 2018 IEEE Symp. Ser. Comput. Intell. SSCI 2018*, pp. 1837–1844, 2018, doi: 10.1109/SSCI.2018.8628641.
-

- [17] M. E. Karim, M. Foysal, and S. Das, "Stock Price Prediction Using Bi-LSTM and GRU-Based Hybrid Deep Learning Approach," *Lect. Notes Networks Syst.*, vol. 479, no. November, pp. 701–711, 2023, doi: 10.1007/978-981-19-3148-2_60.
- [18] W. Lu, "A CNN-BiLSTM-AM method for stock price prediction," *Neural Comput. Appl.*, vol. 33, no. 10, pp. 4741–4753, 2021, doi: 10.1007/s00521-020-05532-z.
- [19] M. E. Karim and S. Ahmed, "A Deep Learning-Based Approach for Stock Price Prediction Using Bidirectional Gated Recurrent Unit and Bidirectional Long Short Term Memory Model," *2021 2nd Glob. Conf. Adv. Technol. GCAT 2021*, no. October, 2021, doi: 10.1109/GCAT52182.2021.9587895.
- [20] S. Mondal, Prapanna; Shit, Labani; Goswami, "STUDY OF EFFECTIVENESS OF TIME SERIES MODELING (ARIMA) IN FORECASTING STOCK PRICES," *Int. J. Comput. Sci. Eng. Appl.*, vol. 4, no. 2, p. 13, 2014, doi: 10.1016/S0140-6736(01)13488-4.
- [21] S. Siami-Namini, N. Tavakoli, and A. S. Namin, "A Comparative Analysis of Forecasting Financial Time Series Using ARIMA, LSTM, and BiLSTM," 2019, [Online]. Available: <http://arxiv.org/abs/1911.09512>
- [22] K. H. Lee and G. S. Jo, "Expert system for predicting stock market timing using a candlestick chart," vol. 16, pp. 357–364, 1999.
- [23] C. Tsai and Z. Quan, "Stock Prediction by Searching for Similarities in Candlestick Charts," vol. 5, no. 2, 2014, doi: 10.1145/2591672.
- [24] S. Siami-Namini, N. Tavakoli, and A. S. Namin, "The Performance of LSTM and BiLSTM in Forecasting Time Series," *Proc. - 2019 IEEE Int. Conf. Big Data, Big Data 2019*, pp. 3285–3292, 2019, doi: 10.1109/BigData47090.2019.9005997.
- [25] M. Rahimzad, A. Moghaddam, and N. Hosam, "Performance Comparison of an LSTM - based Deep Learning Model versus Conventional Machine Learning Algorithms for Streamflow Forecasting," *Water Resour. Manag.*,

- pp. 4167–4187, 2021, doi: 10.1007/s11269-021-02937-w.
- [26] T. Cho, U. Sunarya, M. Yeo, B. Hwang, and Y. S. Koo, “Deep-ACTINet : End-to-End Deep Learning Architecture for Automatic Sleep-Wake Detection Using Wrist Actigraphy”, doi: 10.3390/electronics8121461.
- [27] J. Kim and N. Moon, “BiLSTM model based on multivariate time series data in multiple field for forecasting trading area,” *J. Ambient Intell. Humaniz. Comput.*, no. 0123456789, 2019, doi: 10.1007/s12652-019-01398-9.
- [28] S. Zaheer *et al.*, “A Multi Parameter Forecasting for Stock Time Series Data Using LSTM and Deep Learning Model,” *Mathematics*, vol. 11, no. 3, pp. 1–24, 2023, doi: 10.3390/math11030590.
- [29] Z. Zou and Z. Qu, “Using LSTM in Stock prediction and Quantitative Trading,” *CS230 Deep Learn.*, 2020.
- [30] C. Y. Lai, R. C. Chen, and R. E. Caraka, “Prediction Stock Price Based on Different Index Factors Using LSTM,” *Proc. - Int. Conf. Mach. Learn. Cybern.*, vol. 2019-July, pp. 1–6, 2019, doi: 10.1109/ICMLC48188.2019.8949162.
- [31] A. Lawi, H. Mesra, and S. Amir, “Implementation of Long Short-Term Memory and Gated Recurrent Units on grouped time-series data to predict stock prices accurately,” *J. Big Data*, vol. 9, no. 1, 2022, doi: 10.1186/s40537-022-00597-0.
- [32] J. Chung, C. Gulcehre, K. Cho, and Y. Bengio, “Empirical Evaluation of Gated Recurrent Neural Networks on Sequence Modeling,” pp. 1–9, 2014, [Online]. Available: <http://arxiv.org/abs/1412.3555>
- [33] Y. Deng, L. Wang, H. Jia, X. Tong, and F. Li, “A Sequence-to-Sequence Deep Learning Architecture Based on Bidirectional GRU for Type Recognition and Time Location of Combined Power Quality Disturbance,” *IEEE Trans. Ind. INFORMATICS*, vol. 15, no. 8, pp. 4481–4493, 2019.
-

- [34] Y. Liu *et al.*, “Bidirectional GRU networks-based next POI category prediction for healthcare,” *Int. J. Intell. Syst.*, vol. 37, no. 7, pp. 4020–4040, 2022, doi: <https://doi.org/10.1002/int.22710>.
- [35] D. Singh and B. Singh, “Investigating the impact of data normalization on classification performance,” *Appl. Soft Comput.*, vol. 97, p. 105524, 2020.
- [36] Y. Liu, Y. Zhou, S. Wen, and C. Tang, “A Strategy on Selecting Performance Metrics for Classifier Evaluation,” *Int. J. Mob. Comput. Multimed. Commun.*, vol. 6, no. 4, pp. 20–35, 2014, doi: [10.4018/IJMCMC.2014100102](https://doi.org/10.4018/IJMCMC.2014100102).