DAFTAR PUSTAKA

Abraham, J., Higdon, D., & Nelson, J. (2018). Cryptocurrency price prediction using tweet volumes and sentiment analysis. *SMU Data Science Review*, *1*(3), 22.

Akiba, T., Sano, S., Yanase, T., Ohta, T., & Koyama, M. (2019). *Optuna: A Next-generation Hyperparameter Optimization Framework*. http://arxiv.org/abs/1907.10902

Box, G. E. P., Jenkins, G. M., & Reinsel, G. C. (2008). *Time Series Analysis*. Wiley. https://doi.org/10.1002/9781118619193

Bullmann, D., Klemm, J., & Pinna, A. (2019). In search for stability in crypto-assets are stablecoins the solution? *ECB Occasional Paper*. https://doi.org/10.2866/969389

Burniske, C., & Tatar, J. (2018). *Cryptoassets: The innovative investor's guide to bitcoin and beyond*. McGraw-Hill Education.

Buslim, N., Rahmatullah, I. L., Setyawan, B. A., & Alamsyah, A. (2021). Comparing Bitcoin's Prediction Model Using GRU, RNN, and LSTM by Hyperparameter Optimization Grid Search and Random Search. *2021 9th International Conference on Cyber and IT Service Management (CITSM)*, 1–6. https://doi.org/10.1109/CITSM52892.2021.9588947

Caux, M., Bernardini, F., & Viterbo, J. (2020). Short-Term Forecasting in Bitcoin Time Series Using LSTM and GRU RNNs. *Anais Do Symposium on Knowledge Discovery, Mining and Learning (KDMiLe 2020)*, 97–104. https://doi.org/10.5753/kdmile.2020.11964

Cho, K., Van Merriënboer, B., Gulcehre, C., Bahdanau, D., Bougares, F., Schwenk, H., & Bengio, Y. (2014). Learning phrase representations using RNN encoder-decoder for statistical machine translation. *EMNLP 2014 - 2014 Conference on Empirical Methods in Natural Language Processing, Proceedings of the Conference*, 1724–1734. https://doi.org/10.3115/v1/d14-1179

Chohan, U. W. (2017). The Double Spending Problem and Cryptocurrencies. *SSRN Electronic Journal*. https://doi.org/10.2139/ssrn.3090174

Dennis, A., Wixom, B. H., & Roth, R. M. (2012). *Systems Analysis and Design* (5th ed.). Wiley.

Du, S., Li, T., Yang, Y., & Horng, S. J. (2020). Multivariate time series forecasting via attention-based encoder–decoder framework. *Neurocomputing*, *388*, 269–279. https://doi.org/10.1016/j.neucom.2019.12.118

Dutta, A., Kumar, S., & Basu, M. (2020). A Gated Recurrent Unit Approach to Bitcoin Price Prediction. *Journal of Risk and Financial Management*, *13*(2). https://doi.org/10.3390/jrfm13020023

Feurer, M., & Hutter, F. (2019). Hyperparameter Optimization. In *Automated Machine Learning* (pp. 3–33). Springer, Cham. https://doi.org/10.1007/978-3-030-05318-5_1

Hamayel, M. J., & Owda, A. Y. (2021). A Novel Cryptocurrency Price Prediction Model Using GRU, LSTM and bi-LSTM Machine Learning Algorithms. *AI*, *2*(4), 477–496. https://doi.org/10.3390/ai2040030

Hasibuan, Z. (2007). *Metodologi Penelitian Pada Bidang Ilmu Komputer dan Teknologi Informasi: Konsep, Teknik dan Aplikasi*. Fakultas Ilmu Komputer, Universitas Indonesia.

Hassani, H., Huang, X., & Silva, E. (2018). Big-crypto: Big data, blockchain and cryptocurrency. *Big Data and Cognitive Computing*, *2*(4), 1–15. https://doi.org/10.3390/bdcc2040034

Hinton, G. E., Srivastava, N., Krizhevsky, A., Sutskever, I., & Salakhutdinov, R. R. (2012). *Improving neural networks by preventing co-adaptation of feature detectors*. 1–18. http://arxiv.org/abs/1207.0580

Hoque, K. E., & Aljamaan, H. (2021). Impact of hyperparameter tuning on machine learning models in stock price forecasting. *IEEE Access*, *9*, 163815–163830. https://doi.org/10.1109/ACCESS.2021.3134138

Huynh, H. D., Dang, L. M., & Duong, D. (2017). A new model for stock price movements prediction using deep neural network. *ACM International Conference Proceeding Series*, *2017-Decem*, 57–62. https://doi.org/10.1145/3155133.3155202

Jay, P., Kalariya, V., Parmar, P., Tanwar, S., Kumar, N., & Alazab, M. (2020). Stochastic Neural Networks for Cryptocurrency Price Prediction. *IEEE Access*, *8*, 82804–82818. https://doi.org/10.1109/ACCESS.2020.2990659

Khan, A. S., & Augustine, P. (2019). Predictive analytics in cryptocurrency using neural networks: A comparative study. *International Journal of Recent Technology and Engineering (IJRTE)*, *7*(6). https://towardsdatascience.com/activation-functions-

Kraaijeveld, O., & de Smedt, J. (2020). The predictive power of public Twitter sentiment for forecasting cryptocurrency prices. *Journal of International Financial Markets, Institutions and Money*, *65*. https://doi.org/10.1016/j.intfin.2020.101188

Krauß, J. (2022). *Optimizing Hyperparameters for Machine Learning Algorithms in Production*. Apprimus Wissenschaftsverlag.

Kumar, D., & Rath, S. K. (2020). Predicting the Trends of Price for Ethereum Using Deep Learning Techniques. *Advances in Intelligent Systems and Computing*, *1056*, 103–114. https://doi.org/10.1007/978-981-15-0199-9_9

Labach, A., Salehinejad, H., & Valaee, S. (2019). Survey of dropout methods for deep neural networks. *ArXiv*.

Lien Minh, D., Sadeghi-Niaraki, A., Huy, H. D., Min, K., & Moon, H. (2018). Deep learning approach for short-term stock trends prediction based on two-stream gated recurrent unit network. *IEEE Access*, *6*, 55392–55404. https://doi.org/10.1109/ACCESS.2018.2868970

Lim, B., & Zohren, S. (2021). Time-series forecasting with deep learning: A survey. *Philosophical Transactions of the Royal Society A: Mathematical, Physical and Engineering Sciences*, *379*(2194). https://doi.org/10.1098/rsta.2020.0209

Liu, B., Fu, C., Bielefield, A., & Liu, Y. Q. (2017). Forecasting of Chinese Primary Energy Consumption in 2021 with GRU artificial neural network. *Energies*, *10*(10), 1–15. https://doi.org/10.3390/en10101453

Mahmoud, A., & Mohammed, A. (2021). A Survey on Deep Learning for Time-Series Forecasting. *Machine Learning and Big Data Analytics Paradigms: Analysis, Applications and Challenges*, 365–392. https://doi.org/10.1007/978-3-030-59338-4_19

McNally, S., Roche, J., & Caton, S. (2018). Predicting the Price of Bitcoin Using Machine Learning. *Proceedings - 26th Euromicro International Conference on Parallel, Distributed, and Network-Based Processing, PDP 2018*, 339–343. https://doi.org/10.1109/PDP2018.2018.00060

Metcalfe, W. (2020). *Ethereum, Smart Contracts, DApps* (pp. 77–93). https://doi.org/10.1007/978-981-15-3376-1_5

Nakamoto, S. (2008). *Bitcoin: A Peer-to-Peer Electronic Cash System*. 1–10.

Nasirtafreshi, I. (2022). Forecasting cryptocurrency prices using Recurrent Neural Network and Long Short-term Memory. *Data and Knowledge Engineering*, *139*. https://doi.org/10.1016/j.datak.2022.102009

Noh, S. H. (2021). Analysis of gradient vanishing of RNNs and performance comparison. *Information (Switzerland)*, *12*(11). https://doi.org/10.3390/info12110442

Obaidur Rahman, M., Sabir Hossain, M., Shafiul Alam Forhad, M., Kamal Hossen, M., & Junaid, T.-S. (2019). Predicting Prices of Stock Market using Gated Recurrent Units (GRUs) Neural Networks. *IJCSNS International Journal of Computer Science and Network Security*, *19*(1). https://www.researchgate.net/publication/331385031

Optuna. (2020). *Efficient Optimization Algorithms*. https://optuna.readthedocs.io/en/stable/tutorial/10_key_features/003_efficient_optimization_algorithms.html#which-sampler-and-pruner-should-be-used

Owen, L. (2022). *Hyperparameter Tuning with Python: Boost your machine learning model's performance via hyperparameter tuning*. Packt Publishing.

Oyewola, D. O., Dada, E. G., & Ndunagu, J. N. (2022). A novel hybrid walk-forward ensemble optimization for time series cryptocurrency prediction. *Heliyon*, *8*(11), e11862. https://doi.org/10.1016/j.heliyon.2022.e11862

Patel, M. M., Tanwar, S., Gupta, R., & Kumar, N. (2020). A Deep Learning-based Cryptocurrency Price Prediction Scheme for Financial Institutions. *Journal of Information Security and Applications*, *55*. https://doi.org/10.1016/j.jisa.2020.102583

Petneházi, G. (2018). *Recurrent Neural Networks for Time Series Forecasting*. http://arxiv.org/abs/1901.00069

Prajapati, P. (2020). *Predictive analysis of Bitcoin price considering social sentiments*. http://arxiv.org/abs/2001.10343

Sabry, F., Labda, W., Erbad, A., & Malluhi, Q. (2020). Cryptocurrencies and Artificial Intelligence: Challenges and Opportunities. *IEEE Access*, *8*, 175840–175858. https://doi.org/10.1109/access.2020.3025211

Saud, A. S., & Shakya, S. (2020). Analysis of look back period for stock price prediction with RNN variants: A case study on banking sector of NEPSE. *Procedia Computer Science*, *167*, 788–798. https://doi.org/10.1016/j.procs.2020.03.419

Semeniuta, S., Severyn, A., & Barth, E. (2016). Recurrent dropout without memory loss. *COLING 2016 - 26th International Conference on Computational Linguistics,*

Proceedings of COLING 2016: Technical Papers, 1757–1766. https://doi.org/10.5281/zenodo.546212

Sethia, A., & Raut, P. (2019). Application of LSTM, GRU and ICA for Stock Price Prediction. In *Information and Communication Technology for Intelligent Systems: Proceedings of ICTIS 2018* (Vol. 2, pp. 479–487). Springer. https://doi.org/10.1007/978-981-13-1747-7_46

Shahi, T. B., Shrestha, A., Neupane, A., & Guo, W. (2020). Stock price forecasting with deep learning: A comparative study. *Mathematics*, *8*(9), 1–15. https://doi.org/10.3390/math8091441

Siami-Namini, S., Tavakoli, N., & Siami Namin, A. (2018). A Comparison of ARIMA and LSTM in Forecasting Time Series. *2018 17th IEEE International Conference on Machine Learning and Applications (ICMLA)*, 1394–1401. https://doi.org/10.1109/ICMLA.2018.00227

Srivastava, N., Hinton, G., Krizhevsky, A., Sutskever, I., & Salakhutdinov, R. (2014). Dropout : A Simple Way to Prevent Neural Networks from Overfitting. *Journal of Machine Learning Research*, *15*, 1929–1958.

Tanwar, S., Patel, N. P., Patel, S. N., Patel, J. R., Sharma, G., & Davidson, I. E. (2021). Deep Learning-Based Cryptocurrency Price Prediction Scheme With Inter-Dependent Relations. *IEEE Access*, *9*, 138633–138646. https://doi.org/10.1109/ACCESS.2021.3117848

Vanderbilt, D., Xie, K., & Sun, W. (2020). AN APPLIED STUDY OF RNN MODELS FOR PREDICTING CRYPTOCURRENCY PRICES. *Issues In Information Systems*, *21*(2), 135–143. https://doi.org/10.48009/2_iis_2020_135-143

Wang, S., Yuan, Y., Wang, X., Li, J., Qin, R., & Wang, F. Y. (2018). An Overview of Smart Contract: Architecture, Applications, and Future Trends. *IEEE Intelligent Vehicles Symposium, Proceedings*, *2018-June*(Iv), 108–113. https://doi.org/10.1109/IVS.2018.8500488

Wei, W. C. (2018). The impact of Tether grants on Bitcoin. *Economics Letters*, *171*, 19–22. https://doi.org/10.1016/j.econlet.2018.07.001

Yamak, P. T., Yujian, L., & Gadosey, P. K. (2019). A comparison between ARIMA, LSTM, and GRU for time series forecasting. *ACM International Conference Proceeding Series*, 49–55. https://doi.org/10.1145/3377713.3377722

Yu, T., & Zhu, H. (2020). *Hyper-Parameter Optimization: A Review of Algorithms and Applications*. http://arxiv.org/abs/2003.05689

Yu, Y., Si, X., Hu, C., & Zhang, J. (2019). A Review of Recurrent Neural Networks: LSTM Cells and Network Architectures. *Neural Computation*, *31*(7), 1235–1270. https://doi.org/10.1162/neco_a_01199

Zaremba, W., Sutskever, I., & Vinyals, O. (2015). *Recurrent Neural Network Regularization*. *2013*, 1–8.

Zoumpekas, T., Houstis, E., & Vavalis, M. (2020). ETH analysis and predictions utilizing deep learning. *Expert Systems with Applications*, *162*(August), 113866. https://doi.org/10.1016/j.eswa.2020.113866