

DAFTAR PUSTAKA

- [1] S. Nakamoto, "Bitcoin: A Peer-to-Peer Electronic Cash System." [Online]. Available: www.bitcoin.org
- [2] C. Pérez-Solà, S. Delgado-Segura, G. Navarro-Arribas, and J. Herrera-Joancomartí, "Double-spending prevention for Bitcoin zero-confirmation transactions," *Int J Inf Secur*, vol. 18, no. 4, pp. 451–463, 2019, doi: 10.1007/s10207-018-0422-4.
- [3] CoinMarketCap, "Today's cryptocurrency prices by market cap," CoinMarketCap.
- [4] T. V. H. Nguyen, B. T. Nguyen, T. C. Nguyen, and Q. Q. Nguyen, "Bitcoin return: Impacts from the introduction of new altcoins," *Res Int Bus Finance*, vol. 48, pp. 420–425, Apr. 2019, doi: 10.1016/j.ribaf.2019.02.001.
- [5] P. Ciaian, M. Rajcaniova, and d'Artis Kancs, "Virtual relationships: Short- and long-run evidence from BitCoin and altcoin markets," *Journal of International Financial Markets, Institutions and Money*, vol. 52, pp. 173–195, Jan. 2018, doi: 10.1016/j.intfin.2017.11.001.
- [6] I. N. Agustin, "The Integration of fundamental and Technical Analysis in predicting the Stock Price," *J. Manaj. Maranatha*, vol. 18, no. 2, pp. 93–102, May 2019.
- [7] A. Alkamali, "Bitcoin Short-term Price Prediction Using Time Series Analysis." [Online]. Available: <https://repository.rit.edu/theses>
- [8] Z. Chen, C. Li, and W. Sun, "Bitcoin price prediction using machine learning: An approach to sample dimension engineering," *J Comput Appl Math*, vol. 365, Feb. 2020, doi: 10.1016/j.cam.2019.112395.
- [9] Ethem Alpaydin, *Introduction to Machine Learning*, Fourth. MIT Press, 2020.
- [10] C.-H. Wu, C.-C. Lu, Y.-F. Ma, and R.-S. Lu, "A New Forecasting Framework for Bitcoin Price with LSTM," in *2018 IEEE International Conference on Data Mining Workshops (ICDMW)*, 2018, pp. 168–175. doi: 10.1109/ICDMW.2018.00032.
- [11] I. Nasirtafreshi, "Forecasting cryptocurrency prices using Recurrent Neural Network and Long Short-term Memory," *Data Knowl Eng*, vol. 139, May 2022, doi: 10.1016/j.datak.2022.102009.
- [12] S. Tandon, S. Tripathi, P. Saraswat, and C. Dabas, "Bitcoin Price Forecasting using LSTM and 10-Fold Cross validation," in *2019*

International Conference on Signal Processing and Communication (ICSC), 2019, pp. 323–328. doi: 10.1109/ICSC45622.2019.8938251.

- [13] I. A. Hashish, F. Forni, G. Andreotti, T. Facchinetti, and S. Darjani, “A Hybrid Model for Bitcoin Prices Prediction using Hidden Markov Models and Optimized LSTM Networks,” in *2019 24th IEEE International Conference on Emerging Technologies and Factory Automation (ETFA)*, 2019, pp. 721–728. doi: 10.1109/ETFA.2019.8869094.
- [14] S. McNally, J. Roche, and S. Caton, “Predicting the Price of Bitcoin Using Machine Learning,” in *Proceedings - 26th Euromicro International Conference on Parallel, Distributed, and Network-Based Processing, PDP 2018*, Institute of Electrical and Electronics Engineers Inc., Jun. 2018, pp. 339–343. doi: 10.1109/PDP2018.2018.00060.
- [15] Y. Li, Z. Zheng, and H. N. Dai, “Enhancing bitcoin price fluctuation prediction using attentive LSTM and embedding network,” *Applied Sciences (Switzerland)*, vol. 10, no. 14, Jul. 2020, doi: 10.3390/app10144872.
- [16] T. Phaladisailoed and T. Numnonda, “Machine Learning Models Comparison for Bitcoin Price Prediction,” in *2018 10th International Conference on Information Technology and Electrical Engineering (ICITEE)*, 2018, pp. 506–511. doi: 10.1109/ICITEED.2018.8534911.
- [17] A. Singh, A. Kumar, and Z. Akhtar, “Bitcoin Price Prediction: A Deep Learning Approach,” in *Proceedings of the 8th International Conference on Signal Processing and Integrated Networks, SPIN 2021*, Institute of Electrical and Electronics Engineers Inc., 2021, pp. 1053–1058. doi: 10.1109/SPIN52536.2021.9565988.
- [18] S. Karasu, A. Altan, Z. Saraç, and R. Hacıoğlu, “Prediction of Bitcoin prices with machine learning methods using time series data,” in *2018 26th Signal Processing and Communications Applications Conference (SIU)*, 2018, pp. 1–4. doi: 10.1109/SIU.2018.8404760.
- [19] K. Rathan, S. V. Sai, and T. S. Manikanta, “Crypto-Currency price prediction using Decision Tree and Regression techniques,” in *2019 3rd International Conference on Trends in Electronics and Informatics (ICOEI)*, 2019, pp. 190–194. doi: 10.1109/ICOEI.2019.8862585.
- [20] R. Albariqi and E. Winarko, “Prediction of Bitcoin Price Change using Neural Networks,” in *Proceeding - ICoSTA 2020: 2020 International Conference on Smart Technology and Applications: Empowering Industrial IoT by Implementing Green Technology for Sustainable Development*,

- Institute of Electrical and Electronics Engineers Inc., Feb. 2020. doi: 10.1109/ICoSTA48221.2020.1570610936.
- [21] Z. Zheng, S. Xie, H. Dai, X. Chen, and H. Wang, “An Overview of Blockchain Technology: Architecture, Consensus, and Future Trends,” in *Proceedings - 2017 IEEE 6th International Congress on Big Data, BigData Congress 2017*, Institute of Electrical and Electronics Engineers Inc., Sep. 2017, pp. 557–564. doi: 10.1109/BigDataCongress.2017.85.
- [22] D. Efanov and P. Roschin, “The all-pervasiveness of the blockchain technology,” in *Procedia Computer Science*, Elsevier B.V., 2018, pp. 116–121. doi: 10.1016/j.procs.2018.01.019.
- [23] Z. Zheng, S. Xie, H. Dai, X. Chen, and H. Wang, “An Overview of Blockchain Technology: Architecture, Consensus, and Future Trends,” in *2017 IEEE International Congress on Big Data (BigData Congress)*, 2017, pp. 557–564. doi: 10.1109/BigDataCongress.2017.85.
- [24] U. Mukhopadhyay, A. Skjellum, O. Hambolu, J. Oakley, L. Yu, and R. Brooks, “A brief survey of Cryptocurrency systems,” in *2016 14th Annual Conference on Privacy, Security and Trust (PST)*, 2016, pp. 745–752. doi: 10.1109/PST.2016.7906988.
- [25] J. Hull, *Options, Futures and Other Derivatives*. in Eastern economy edition. Pearson/Prentice Hall, 2009. [Online]. Available: <https://books.google.co.id/books?id=sEmQZoHoJCcC>
- [26] J. J. . Murphy, *Technical analysis of the financial markets*. Shin Won Agency Co., 2000.
- [27] J. S. Hunter, “The exponentially weighted moving average,” *J. Qual. Technol.*, vol. 18, no. 4, pp. 203–210, Oct. 1986.
- [28] J. W. Wilder, *New Concepts in Technical Trading Systems*. Trend Research, 1978. [Online]. Available: <https://books.google.co.id/books?id=WesJAQAAMAAJ>
- [29] A. Țăran-Moroșan, “The relative strength index revisited,” *African Journal of Business Management*, vol. 5, no. 14, pp. 5855–5862, 2011, [Online]. Available: <http://www.academicjournals.org/ajbm>
- [30] F. Petropoulos *et al.*, “Forecasting: theory and practice,” Jul. 01, 2022, *Elsevier B.V.* doi: 10.1016/j.ijforecast.2021.11.001.
- [31] K. P. Murphy, *Machine learning: a probabilistic perspective*. MIT press, 2012.

- [32] D. Kreuzberger, N. Kuhl, and S. Hirschl, “Machine Learning Operations (MLOps): Overview, Definition, and Architecture,” *IEEE Access*, vol. 11, pp. 31866–31879, 2023, doi: 10.1109/ACCESS.2023.3262138.
- [33] Y. Lecun, Y. Bengio, and G. Hinton, “Deep learning,” May 27, 2015, *Nature Publishing Group*. doi: 10.1038/nature14539.
- [34] Y. Guo, Y. Liu, A. Oerlemans, S. Lao, S. Wu, and M. S. Lew, “Deep learning for visual understanding: A review,” *Neurocomputing*, vol. 187, pp. 27–48, Apr. 2016, doi: 10.1016/j.neucom.2015.09.116.
- [35] H. Salehinejad, J. Baarbe, S. Sankar, J. Barfett, E. Colak, and S. Valaee, “Recent Advances in Recurrent Neural Networks,” *CoRR*, vol. abs/1801.01078, 2018, [Online]. Available: <http://arxiv.org/abs/1801.01078>
- [36] S. Haykin, *Neural networks: Comprehensive foundation*, 2nd ed. Piscataway, NJ: I.E.E.E. Press, 1999.
- [37] R. C. Staudemeyer and E. R. Morris, “Understanding LSTM - a tutorial into Long Short-Term Memory Recurrent Neural Networks,” *CoRR*, vol. abs/1909.09586, 2019, [Online]. Available: <http://arxiv.org/abs/1909.09586>
- [38] S. Hochreiter and J. Schmidhuber, “LSTM can Solve Hard Long Time Lag Problems,” in *Advances in Neural Information Processing Systems*, M. C. Mozer, M. Jordan, and T. Petsche, Eds., MIT Press, 1996. [Online]. Available: https://proceedings.neurips.cc/paper_files/paper/1996/file/a4d2f0d23dcc84ce983ff9157f8b7f88-Paper.pdf
- [39] S. Hochreiter and J. Schmidhuber, “Long Short-Term Memory,” *Neural Comput*, vol. 9, no. 8, pp. 1735–1780, 1997, doi: 10.1162/neco.1997.9.8.1735.
- [40] C. Olah, “Understanding LSTM Networks,” 2015. [Online]. Available: <https://colah.github.io/posts/2015-08-Understanding-LSTMs/>
- [41] J. Chung, C. Gulcehre, K. Cho, and Y. Bengio, “Empirical Evaluation of Gated Recurrent Neural Networks on Sequence Modeling,” 2014. [Online]. Available: <https://arxiv.org/abs/1412.3555>
- [42] A. de Myttenaere, B. Golden, B. Le Grand, and F. Rossi, “Mean Absolute Percentage Error for regression models,” *Neurocomputing*, vol. 192, pp. 38–48, Jun. 2016, doi: 10.1016/j.neucom.2015.12.114.
- [43] D. Chicco, M. J. Warrens, and G. Jurman, “The coefficient of determination R-squared is more informative than SMAPE, MAE, MAPE, MSE and RMSE in regression analysis evaluation,” *PeerJ Comput Sci*, vol. 7, pp. 1–24, 2021, doi: 10.7717/PEERJ-CS.623.

- [44] O. Renaud and M.-P. Victoria-Feser, “A robust coefficient of determination for regression,” *J Stat Plan Inference*, vol. 140, no. 7, pp. 1852–1862, 2010, doi: <https://doi.org/10.1016/j.jspi.2010.01.008>.
- [45] R. Su and X. Li, “Modular Monolith: Is This the Trend in Software Architecture?,” in *Proceedings of the 1st International Workshop on New Trends in Software Architecture*, in SATrends '24. New York, NY, USA: Association for Computing Machinery, 2024, pp. 10–13. doi: 10.1145/3643657.3643911.
- [46] G. A. Di Lucca and A. R. Fasolino, “Testing Web-based applications: The state of the art and future trends,” *Inf Softw Technol*, vol. 48, no. 12, pp. 1172–1186, Dec. 2006, doi: 10.1016/j.infsof.2006.06.006.
- [47] S. Amann, S. Proksch, S. Nadi, and M. Mezini, “A study of visual studio usage in practice,” in *2016 IEEE 23rd International Conference on Software Analysis, Evolution, and Reengineering, SANER 2016*, Institute of Electrical and Electronics Engineers Inc., May 2016, pp. 124–134. doi: 10.1109/SANER.2016.39.
- [48] M. Lutz, *Learning python: Powerful object-oriented programming*. O'Reilly Media, 2009.
- [49] A. Kadiyala and A. Kumar, “Applications of Python to evaluate environmental data science problems,” *Environ Prog Sustain Energy*, vol. 36, no. 6, pp. 1580–1586, 2017, doi: <https://doi.org/10.1002/ep.12786>.
- [50] J. M. Perkel, “Why Jupyter is data scientists’ computational notebook of choice,” *Nature*, vol. 563, no. 7729, pp. 145–146, Nov. 2018.
- [51] W. McKinney and P. D. Team, *Pandas-Powerful python data analysis toolkit. Pandas-Powerful Python Data Analysis Toolkit*. 2015.
- [52] C. R. Harris *et al.*, “Array programming with NumPy,” Sep. 17, 2020, *Nature Research*. doi: 10.1038/s41586-020-2649-2.
- [53] J. D. Hunter, “Matplotlib: A 2D Graphics Environment,” *Comput Sci Eng*, vol. 9, no. 3, pp. 90–95, 2007, doi: 10.1109/MCSE.2007.55.
- [54] F. Pedregosa FABIANPEDREGOSA *et al.*, “Scikit-learn: Machine Learning in Python Gaël Varoquaux Bertrand Thirion Vincent Dubourg Alexandre Passos PEDREGOSA, VAROQUAUX, GRAMFORT ET AL. Matthieu Perrot,” 2011. [Online]. Available: <http://scikit-learn.sourceforge.net>.
- [55] M. Abadi *et al.*, “TensorFlow: A System for Large-Scale Machine Learning,” in *12th USENIX Symposium on Operating Systems Design and Implementation (OSDI 16)*, Savannah, GA: USENIX Association, Nov.

- 2016, pp. 265–283. [Online]. Available: <https://www.usenix.org/conference/osdi16/technical-sessions/presentation/abadi>
- [56] J. Faouzi, “pyts: A Python Package for Time Series Classification,” 2020. [Online]. Available: <https://github.com/johannfaouzi/pyts>.
- [57] K. Salo, “Comparative study on Python web frameworks: Flask and Django.”
- [58] J. D. Ullman, J. Widom, and H. Garcia-Molina, *Database systems: The complete book*. Prentice Hall, 2009.
- [59] P. DuBois, *MySQL*. Pearson Education, 2013. [Online]. Available: <https://books.google.co.id/books?id=JgFTUsIC0bUC>
- [60] R. Pooley and P. King, “The unified modelling language and performance engineering,” *IEE Proceedings: Software*, vol. 146, no. 1, pp. 2–10, 1999, doi: 10.1049/ip-sen:19990151.
- [61] R. Fauzan, D. Siahaan, S. Rochimah, and E. Triandini, “Use Case Diagram Similarity Measurement: A New Approach,” in *2019 12th International Conference on Information & Communication Technology and System (ICTS)*, 2019, pp. 3–7. doi: 10.1109/ICTS.2019.8850978.
- [62] T. Ahmad, J. Iqbal, A. Ashraf, D. Truscan, and I. Porres, “Model-based testing using UML activity diagrams: A systematic mapping study,” 2019, *Elsevier Ireland Ltd*. doi: 10.1016/j.cosrev.2019.07.001.
- [63] M. Vilcinskaite, “Introducing the Modern and Future Development of ‘Web Applications’ Using JHipster Development Platform.”
- [64] S. Nidhra, “Black Box and White Box Testing Techniques - A Literature Review,” *International Journal of Embedded Systems and Applications*, vol. 2, no. 2, pp. 29–50, Jun. 2012, doi: 10.5121/ijesa.2012.2204.
- [65] K. N. Hareton, “A study of user acceptance tests,” *Software quality journal*, vol. 6, pp. 137–149, 1997.
- [66] K. Ganesh, S. Mohapatra, S. P. Anbuudayasankar, and P. Sivakumar, *Enterprise resource planning*, 2014th ed. in *Management for Professionals*. Basel, Switzerland: Springer International Publishing, 2014.
- [67] I. Afrianto, A. Heryandi, and A. Finandhita, “User acceptance test for digital signature application in academic domain to support the covid-19 work from home program,” *IJISTECH (International Journal of Information System and Technology)*, vol. 5, no. 3, 2021.

- [68] D. A. Menasce, “Load testing of Web sites,” *IEEE Internet Comput*, vol. 6, no. 4, pp. 70–74, 2002, doi: 10.1109/MIC.2002.1020328.
- [69] Emily. Halili, *Apache JMeter*. Packt Publishing, 2008.
- [70] R. E. Wahyuni, B. Provinsi, and J. Tengah, “OPTIMASI PREDIKSI INFLASI DENGAN NEURAL NETWORK PADA TAHAP WINDOWING: ADAKAH PENGARUH PERBEDAAN WINDOW SIZE?,” 2021.
- [71] A. Bâra and S. V. Oprea, “An ensemble learning method for Bitcoin price prediction based on volatility indicators and trend,” *Eng Appl Artif Intell*, vol. 133, Jul. 2024, doi: 10.1016/j.engappai.2024.107991.