

DAFTAR PUSTAKA

- [1] R. J. Hyndman and G. Athanasopoulos, "Forecasting : principles and practice," 2012.
- [2] Y. Hu, Z. Tao, D. Xing, Z. Pan, J. Zhao, and X. Chen, "Research on stock returns forecast of the four major banks based on ARMA and GARCH model," *J. Phys. Conf. Ser.*, vol. 1616, no. 1, 2020, doi: 10.1088/1742-6596/1616/1/012075.
- [3] A. Kurani, P. Doshi, A. Vakharia, and M. Shah, "A Comprehensive Comparative Study of Artificial Neural Network (ANN) and Support Vector Machines (SVM) on Stock Forecasting," *Ann. Data Sci.*, 2021, doi: 10.1007/s40745-021-00344-x.
- [4] V. S. Pandey and A. Bajpai, "Predictive efficiency of ARIMA and ANN models: a case analysis of nifty fifty in Indian stock market," *Int. J. Appl. Eng. Res. ISSN*, vol. 14, no. 2, pp. 232–244, 2019.
- [5] M. A. Fikri, "PENGARUH TINGKAT SUKU BUNGA , YIELD OBLIGASI PEMERINTAH INDONESIA , NILAI TUKAR , INDEKS HARGA KOMODITAS MINYAK MENTAH , DAN COVID- 19 TERHADAP PERUBAHAN HARGA SAHAM DI BURSA EFEK INDONESIA PERIODE 2013 SAMPAI DENGAN," *J. Ilm. Mhs. FEB*, vol. 10, no. 1, 2020, [Online]. Available: <https://jimfeb.ub.ac.id/index.php/jimfeb/article/view/7970/6785>.
- [6] A. Novita, "Prediksi Pergerakan Harga Saham Pada Bank Terbesar Di Indonesia Dengan Metode Backpropagation Neural Network," *Jutisi*, vol. 05, no. 01, pp. 965–972, 2009.
- [7] E. Aristanto and I. Damayanti, "Peningkatan kapasitas dan penilaian mandiri kinerja pelayanan publik," *JIPEMAS J. Inov. Has. Pengabd. Masy.*, vol. 4, no. 36, pp. 57–68, 2021, doi: 10.33474/jipemas.v4i1.7787.
- [8] C. Meliana, R. Wasono, M. Al Haris, Z. H. Alfiyani, and E. Y. K. Sari, "Peramalan Indeks Harga Saham Gabungan (IHSG) Menggunakan Arimax Dengan Variabel Eksogen Covid-19," *Pros. Semin. Edusainstech*, pp. 258–267, 2020.
- [9] S. M. Ulyah, "Forecasting index and stock returns by considering the effect of Indonesia pre-presidential election 2019 using ARIMAX and VARX approaches," *J. Phys. Conf. Ser.*, vol. 1277, no. 1, 2019, doi: 10.1088/1742-6596/1277/1/012053.
- [10] M. Yucesan, M. Gul, and E. Celik, "Performance comparison between ARIMAX, ANN and ARIMAX-ANN hybridization in sales forecasting for

- furniture industry,” *Drv. Ind.*, vol. 69, no. 4, pp. 357–370, 2018, doi: 10.5552/drind.2018.1770.
- [11] E. Fauziyah, D. Ispriyanti, and Tarno, “PEMODELAN DAN PERAMALAN INDEKS HARGA SAHAM GABUNGAN (IHSG) MENGGUNAKAN ARIMAX-TARCH,” *J. Gaussian*, vol. 10, no. 4, pp. 594–604, 2021.
- [12] W. Alam, R. A. Y. Mrinmoy, R. R. Kumar, K. Sinha, S. Rathod, and K. N. Singh, “Improved ARIMAX modal based on ANN and SVM approaches for forecasting rice yield using weather variables,” *Indian J. Agric. Sci.*, vol. 88, no. 12, pp. 1909–1913, 2018.
- [13] J. F. Torres, D. Hadjout, A. Sebaa, F. Martínez-Álvarez, and A. Troncoso, “Deep Learning for Time Series Forecasting: A Survey,” *Big Data*, vol. 9, no. 1, pp. 3–21, 2021, doi: 10.1089/big.2020.0159.
- [14] C. Fang and C. Wang, “Time Series Data Imputation: A Survey on Deep Learning Approaches,” 2020, [Online]. Available: <https://arxiv.org/abs/2011.11347>.
- [15] B. M. Williams, “Flow Prediction Evaluation of ARIMAX Modeling,” *Transp. Res. Rec. 1776*, no. 01–3488, pp. 194–200.
- [16] W. Anggraeni, F. Mahananto, A. Q. Sari, Z. Zaini, K. B. Andri, and Sumaryanto, “Forecasting the price of Indonesia’s rice using hybrid artificial neural network and autoregressive integrated moving average (hybrid NNS-ARIMAX) with exogenous variables,” *Procedia Comput. Sci.*, vol. 161, pp. 677–686, 2019, doi: 10.1016/j.procs.2019.11.171.
- [17] T. E. Siswanti and T. S. Yanti, “Pemodelan ARIMAX (Autoregressive Integrated Moving Average with Exogenous Variable),” *Pros. Stat.*, vol. 6, no. 2, pp. 113–118, 2020.
- [18] P. Ďurka and P. Silvia, “ARIMA vs. ARIMAX – which approach is better to analyze and forecast macroeconomic time series?,” in *Proceedings of 30th International Conference Mathematical Methods in Economics*, 2012, pp. 136–140.
- [19] W. Anggraeni, R. A. Vinarti, and Y. D. Kurniawati, “Performance Comparisons between Arima and Arimax Method in Moslem Kids Clothes Demand Forecasting: Case Study,” *Procedia Comput. Sci.*, vol. 72, pp. 630–637, 2015, doi: 10.1016/j.procs.2015.12.172.
- [20] S. Eksiandayani, Suhartono, and D. D. Prastyo, “HYBRID ARIMAX-NN MODEL FOR FORECASTING INFLATION,” *Int. Conf. Sci. Technol. Humanit. 2015*, pp. 181–187, 2015.
- [21] D. R. Anderson, K. P. Burnham, and G. C. White, “Comparison of Akaike

information criterion and consistent Akaike information criterion for model selection and statistical inference from capture-recapture studies,” *J. Appl. Stat.*, vol. 25, no. 2, pp. 263–282, 1998, doi: 10.1080/02664769823250.

- [22] T. Chai and R. R. Draxler, “Root mean square error (RMSE) or mean absolute error (MAE)? -Arguments against avoiding RMSE in the literature,” *Geosci. Model Dev.*, vol. 7, no. 3, pp. 1247–1250, 2014, doi: 10.5194/gmd-7-1247-2014.
- [23] J. Tayman and D. A. Swanson, “On the validity of MAPE as a measure of population forecast accuracy,” *Popul. Res. Policy Rev.*, vol. 18, no. 4, pp. 299–322, 1999, doi: 10.1023/A:1006166418051.
- [24] A. Zayegh and N. Al Bassam, “Neural Network Principles and Applications,” *Digit. Syst.*, 2018, doi: 10.5772/intechopen.80416.
- [25] P. Jamal, M. Ali, R. H. Faraj, P. J. M. Ali, and R. H. Faraj, “Data Normalization and Standardization: A Technical Report,” *Mach. Learn. Tech. Reports*, vol. 1, no. 1, pp. 1–6, 2014, [Online]. Available: https://docs.google.com/document/d/1x0A1nUz1WWtMCZb5oVzF0SVMY7a_58KQulqQVT8LaVA/edit#.
- [26] J. Siang, *Jaringan Syaraf Tiruan dan Pemograman Menggunakan Matlab*. 2005.
- [27] S. Zweiri, Yahya H ; James F, Whidborne ; Lakmal D, “A three-term backpropagation algorithm,” *Neurocomputing*, vol. 50, pp. 305–318, 2003.
- [28] P. G. Zhang, “Time series forecasting using a hybrid ARIMA and neural network model,” *Neurocomputing*, vol. 50, pp. 159–175, 2003, doi: 10.1016/S0925-2312(01)00702-0.
- [29] S. Olivia Nellawati and Y. Isbanah, “Analisis Pengaruh Faktor Internal Dan Faktor Eksternal Terhadap Pergerakan Indeks Harga Saham Gabungan (Ihsg) Di Bursa Efek Indonesia Periode 2012 – 201,” *J. Ilmu Manaj.*, vol. 7, no. 1, pp. 113–123, 2019, [Online]. Available: <https://jurnalmahasiswa.unesa.ac.id/index.php/jim/article/view/25167>.
- [30] A. Stewart, *Python Programming for Beginners*. 2016.
- [31] J. Wang, T. Y. Kuo, L. Li, and A. Zeller, “Assessing and Restoring Reproducibility of Jupyter Notebooks,” *Proc. - 2020 35th IEEE/ACM Int. Conf. Autom. Softw. Eng. ASE 2020*, pp. 138–149, 2020, doi: 10.1145/3324884.3416585.
- [32] A. G. B. Abadi, Martín ;Barham, Paul; Chen, Jianmin;Chen, Zhifeng ;Davis, “TensorFlow: A System for Large-Scale Machine Learning,” in *12th USENIX Symposium on Operating Systems Design and Implementation*, 2016, pp. 265–283, doi: 10.1007/978-1-4842-6418-8_2.

- [33] J. Bernard, *Python Recipes Handbook - A Problem-Solution Approach*. 2016.
- [34] O. Travis, *A guide to NumPy*, 1st ed. USA: Trelgol Publishing, 2006.
- [35] J. Hunter and D. Dale, *The Matplotlib User's Guide*. 2007.
- [36] F. ; Pedregosa, G. ; Varoquaux, A. ; Gramfort, V. Michel, and B. Thirion, "Scikit-learn: Machine Learning in Python," *J. Mach. Learn. Res.*, vol. 12, no. 1, pp. 2825–2830, 2011, doi: 10.1289/EHP4713.
- [37] S. Nidhra, "Black Box and White Box Testing Techniques - A Literature Review," *Int. J. Embed. Syst. Appl.*, vol. 2, no. 2, pp. 29–50, 2012, doi: 10.5121/ijesa.2012.2204.