

0.9676 pada Informer), nilai R^2 Informer sebesar 0.9359 menunjukkan kemampuannya dalam menjelaskan variabilitas data secara lebih akurat.

Secara keseluruhan, Informer menunjukkan keunggulan utama dalam akurasi dan konsistensi prediksi, terutama pada horizon waktu menengah dan panjang. Hal ini menjadikannya pilihan yang andal untuk aplikasi operasional maritim, seperti perencanaan logistik dan keselamatan pelayaran, yang memerlukan prediksi jangka panjang yang presisi.

Daftar Pustaka

- [1] Z. Gao, M. Wu, and C. Stefanakos. Multi-step-ahead forecasting of wave conditions based on a physics-based machine learning (pbml) model. *Journal of Marine Science and Engineering*, 8:992, 2020.
- [2] Z. Zhang, X. Lu, Z. Li, D. Chen, and F. Liu. Significant wave height prediction based on wavelet graph neural network. In *2021 IEEE 4th International Conference on Big Data and Artificial Intelligence (BD AI)*, pages 80–85. IEEE, 2021.
- [3] R. Tür. Maximum wave height hindcasting using ensemble linear-nonlinear models. *Theoretical and Applied Climatology*, 141(3):1151–1163, 2020.
- [4] K. Zhao and J. Wang. Significant wave height forecasting based on the hybrid emd-svm method. 2019.
- [5] X. Zhang, Y. Li, S. Gao, and P. Ren. Ocean wave height series prediction with numerical long short-term memory. *Journal of Marine Science and Engineering*, 9(5):514, 2021.
- [6] H. Zhou et al. Informer: Beyond efficient transformer for long sequence time-series forecasting. In *Proceedings of the AAAI Conference on Artificial Intelligence*, 2021.
- [7] R. Meenal, R. Devprakash, and E. Rajasekaran. A comprehensive review of advanced ai/ml applications in solar radiation prediction. *ResearchGate*, 2024.
- [8] A. Skrobotov. Time series forecasting under structural breaks. *Applied Econometrics*, 2024.
- [9] P. Dymora and M. Mazurek. Forecasting the arrival of the next pandemic wave—modeling and tools. *Journal of Education and Training in AI*, 2024.
- [10] R. K. Arora and A. Soni. A dual approach to forecasting in the irish day-ahead market: Time series and machine learning techniques. *International Journal of Energy Studies*, 2024.
- [11] F. Anggraeni, D. Adytia, and A. W. Ramadhan. Forecasting of wave height time series using adaboost and xgboost: Case study in pangandaran, indonesia. In *2021 International Conference on Data Science and Its Applications (ICoDSA)*, pages 97–101. IEEE, 2021.
- [12] E. Karakoyun, M. E. Akiner, and O. M. Katipoğlu. Optimizing river flow rate predictions: Integrating cognitive approaches and meteorological insights. *Natural Hazards*, 2024.
- [13] F. Catani and K. Bhuyan. Artificial intelligence applications for landslide mapping and monitoring on eo data. *Elsevier*, 2025.
- [14] Y. Dong, W. Huang, and G. Laneve. Pests and diseases monitoring and forecasting algorithms, technologies, and applications. *Frontiers in Plant Science*, 2024.
- [15] A. Vaswani, N. Shazeer, N. Parmar, J. Uszkoreit, L. Jones, A. N. Gomez, and I. Polosukhin. Attention is all you need. *Advances in Neural Information Processing Systems*, 30:5998–6008, 2017.
- [16] D. M. H. Nguyen and H. M. T. Alam. Deep learning for ophthalmology: The state-of-the-art and future trends. *arXiv Preprint arXiv:2501.04073*, 2025.
- [17] Y. Ji, R. Wang, and Y. Li. Applications of transformer in computational chemistry: Recent progress and prospects. *Journal of Physical Chemistry Letters*, 2024.
- [18] L. Chen, H. Yang, and P. Shao. Velora: A low-rank adaptation approach for efficient rgb-event based recognition. *arXiv Preprint arXiv:2412.20064*, 2024.