

## DAFTAR PUSTAKA

- [1] D. Wang, C. Zhang, W. Chen, H. Yang, M. Zhang, and A. P. T. Lau, “A review of machine learning-based failure management in optical networks,” Nov. 01, 2022, *Science Press (China)*. doi: 10.1007/s11432-022-3557-9.
- [2] S. Kaur and A. Lubana, “Performance estimation of super combined DWDM system employing machine learning,” *Journal of Optics (India)*, 2024, doi: 10.1007/s12596-024-01770-9.
- [3] A. Lubana and S. Kaur, “FWM crosstalk reduction and performance investigation of SC-DWDM system employing ML techniques,” *Optical Fiber Technology*, vol. 78, p. 103304, Jul. 2023, doi: 10.1016/J.YOFTE.2023.103304.
- [4] M. K. Dutta and W. Das, “Design and performance analysis of wavelength conversion based on four wave mixing in SOA for all optical WDM/ DWDM network,” in *4th International Conference on Innovative Practices in Technology and Management 2024, ICIPTM 2024*, Institute of Electrical and Electronics Engineers Inc., 2024. doi: 10.1109/ICIPTM59628.2024.10563942.
- [5] S. Kulandaivel and R. K. Jeyachitra, “Combined image Hough transform based simultaneous multi-parameter optical performance monitoring for intelligent optical networks,” *Optical Fiber Technology*, vol. 79, p. 103357, Sep. 2023, doi: 10.1016/J.YOFTE.2023.103357.
- [6] Y. Zhou, Z. Yang, Q. Sun, C. Yu, and C. Yu, “An artificial intelligence model based on multi-step feature engineering and deep attention network for optical network performance monitoring,” *Optik (Stuttgart)*, vol. 273, p. 170443, Feb. 2023, doi: 10.1016/J.IJLEO.2022.170443.
- [7] M. A. Amirabadi, S. A. Nezamalhosseini, M. H. Kahaei, and L. R. Chen, “Improving MDM–WDM optical network performance via optimized power allocation using Gaussian noise model,” *Optical Fiber*

- Technology*, vol. 75, p. 103187, Jan. 2023, doi: 10.1016/J.YOFTE.2022.103187.
- [8] C. Zhang, Z. Sun, W. Yang, B. Ye, M. Zhang, and D. Wang, "Expertise-Enhanced Machine Learning for Failure Detection on Field-Deployed Optical Modules," *Journal of Lightwave Technology*, 2024, doi: 10.1109/JLT.2024.3445885.
  - [9] A. Masih and G. Kaur, "Machine learning-based regression models for predicting signal quality of dense wavelength division multiplexing (DWDM) optical communication network," *International Journal of Communication Systems*, vol. 36, no. 13, p. e5518, Sep. 2023, doi: 10.1002/DAC.5518.
  - [10] K. Borzycki and P. Gajewski, "Accurate Location of Fiber Cable Fault with OTDR," *Journal of Telecommunications and Information Technology*, no. 4, pp. 42–52, 2021, doi: 10.26636/jtit.2021.158621.
  - [11] D. Wang *et al.*, "Optical Performance Monitoring of Multiple Parameters in Future Optical Networks," *Journal of Lightwave Technology*, vol. 39, no. 12, pp. 3792–3800, Jun. 2021, doi: 10.1109/JLT.2020.3043012.
  - [12] Y. Gao and X. Zhang, "Optical power monitoring based on back propagation neural network algorithm," in *Fourth International Conference on Optics and Communication Technology (ICOCT 2024)*, 2024, pp. 100–104.
  - [13] C. Zhang, Z. Sun, W. Yang, B. Ye, M. Zhang, and D. Wang, "Expertise-Enhanced Machine Learning for Failure Detection on Field-Deployed Optical Modules," *Journal of Lightwave Technology*, 2024, doi: 10.1109/JLT.2024.3445885.
  - [14] ITU-T Recommendation G.698.2, "Amplified Multichannel Dense Wavelength Division Multiplexing Applications," International Telecommunication Union, 2019. Available : <https://www.itu.int/rec/T-REC-G.698.2/en>

- [15] ITU-T Recommendation G.8201, "Error Performance Parameters and Objectives for Multi-operator International Paths within Optical Transport Networks," International Telecommunication Union, 2011. [Online]. Available: <https://www.itu.int/rec/T-REC-G.8201/en>
- [16] "Standard for Ethernet". IEEE 802.3, Institute of Electrical and Electronics Engineers, New York, USA, 2018. Available: <https://ieeexplore.ieee.org/document/7428776>
- [17] "Spectral Grids for WDM Applications – DWDM Frequency Grid". ITU-T Recommendation G.694.1, International Telecommunication Union, Geneva, Switzerland, 2012. Available: <https://www.itu.int/rec/T-REC-G.694.1/en>
- [18] ISO/IEC 23894: Guidelines for AI System Risk Management, International Organization for Standardization, Geneva, Switzerland, 2021. Available: <https://www.iso.org/standard/78103.html>
- [19] IEEE 7000-2021: Standard for Addressing Ethical Concerns During System Design, Institute of Electrical and Electronics Engineers, 2021. Available: <https://ieeexplore.ieee.org/document/9444787>
- [20] IEEE P3652.1: Guide for Architectural Framework and Application of AI in Big Data Systems, Institute of Electrical and Electronics Engineers, 2021. Available: <https://ieeexplore.ieee.org/document/9407790>
- [21] D. Jadhav, M. Raut, K. Shinde, N. Thoke, and A. Shirsath, "RECBOT: Web-based Laptop Recommendation Using Machine Learning," \*International Journal for Research in Applied Science & Engineering Technology (IJRASET)\*, vol. 12, no. VI, pp. 522–528, Jun. 2024, doi: 10.22214/ijraset.2024.63043.
- [22] ISO 9241-11: Ergonomics of Human-System Interaction - Usability, International Organization for Standardization, Geneva, Switzerland, 2018. Available: <https://www.iso.org/standard/63500.html>

- [23] *ISO 9241-210: Human-Centred Design for Interactive Systems*, International Organization for Standardization, Geneva, Switzerland, 2019. Available: <https://www.iso.org/standard/77520.html>
- [24] *IHochreiter, S., & Schmidhuber, J. (1997). Long Short-Term Memory. Neural Computation, 9(8), 1735–1780.*
- [25] Bengio, Y., Simard, P., & Frasconi, P. (1994). *Learning long-term dependencies with gradient descent is difficult*. IEEE Transactions on Neural Networks, 5(2), 157–166.
- [26] G. Villa, C. Tipantuna, D. S. Guaman, G. V. Arevalo, and B. Arguero, “Machine Learning Techniques in Optical Networks: A Systematic Mapping Study,” IEEE Access, vol. 11, pp. 98714–98750, 2023, doi: 10.1109/ACCESS.2023.3312387..
- [27] J. Smith, L. Wang, and H. Zhao, "Long Short-Term Memory Neural Network with Weight Amplification and Its Application into Gear Remaining Useful Life Prediction," *IEEE Transactions on Industrial Electronics*, vol. 71, no. 5, pp. 2345-2358, 2024.
- [28] M. Schuster and K. K. Paliwal, “Bidirectional recurrent neural networks,” *IEEE Transactions on Signal Processing*, vol. 45, no. 11, pp. 2673–2681, 1997.
- [29] W. Doorsamy, "Condition Monitoring of Electric Machines: Modern Frameworks and Data-Driven Methodologies," *Machines*, vol. 13, no. 144, 2025. DOI: <https://doi.org/10.3390/machines13020144>
- [30] M. Achouch, M. Dimitrova, K. Ziane, S. S. Karganroudi, R. Dhouib, H. Ibrahim, and M. Adda, "On Predictive Maintenance in Industry 4.0: Overview, Models, and Challenges," *Applied Sciences*, vol. 12, no. 8081, Aug. 2022. DOI: [10.3390/app12168081](https://doi.org/10.3390/app12168081).
- [31] *Reducing Complexity and Enhancing Predictive Power of ML-based Lightpath QoT Estimation via SHAP-Assisted Feature Selection*, IEEE, 2024.

- [32] L. Wang, Y. Chen, X. Zhao, and J. Xiang, “Predictive Maintenance Scheduling for Aircraft Engines Based on Remaining Useful Life Prediction,” *IEEE Internet Things J.*, vol. 11, no. 13, pp. 23020–23031, Jul. 2024, doi: 10.1109/JIOT.2024.3376715.
- [33] T. Chen and C. Guestrin, “XGBoost: A Scalable Tree Boosting System,” *Proc. 22nd ACM SIGKDD Int. Conf. Knowl. Discov. Data Mining*, 2016, pp. 785–794. doi: 10.1145/2939672.2939785.
- [34] D. Jadhav, M. Raut, K. Shinde, N. Thoke, and A. Shirasath, "RECBOT: Web-based Laptop Recommendation Using Machine Learning," \*International Journal for Research in Applied Science & Engineering Technology (IJRASET)\*, vol. 12, no. VI, pp. 522–528, Jun. 2024, doi: 10.22214/ijraset.2024.63043.
- [35] D. Wang, C. Zhang, W. Chen, H. Yang, M. Zhang, and A. P. T. Lau, “A Review of Machine Learning-Based Failure Management in Optical Networks,” *Science China Information Sciences*, vol. 65, no. 11, pp. 1–19, Nov. 2022, doi: [10.1007/s11432-022-3557-9](https://doi.org/10.1007/s11432-022-3557-9).
- [36] J. Vesanto, *Developing a Web-Based Record Store Using React and Express.js*, Bachelor's thesis, Haaga-Helia Univ. of Applied Sciences, Helsinki, Finland, 2024.
- [37] M. S. Bonney, M. de Angelis, M. Dal Borgo, L. Andrade, S. Beregi, N. Jamia, and D. J. Wagg, "Development of a digital twin operational platform using Python Flask," *Data-Centric Engineering*, vol. 3, e1, 2022.
- [38] G. Houtmeyers, S. Daniëls, and T. Tuytelaars, “Explainable AI for Time Series Classification: A Review, Taxonomy and Research Directions,” *IEEE Transactions on Pattern Analysis and Machine Intelligence*, vol. 46, no. 5, pp. 5825–5842, May 2024, doi: 10.1109/TPAMI.2024.3332790.
- [39] D. C. Martins, D. T. Braga, F. A. G. França, R. C. C. Formiga, R. S. M. de Souza, and J. C. S. de Souza, “On Symbolic Prediction of Time Series for Predictive Maintenance

- Based on SAX-LSTM," *IEEE Access*, vol. 8, pp. 195147–195162, 2020, doi: 10.1109/ACCESS.2020.3033640.
- [40] D. T. P. Hapsari, C. G. Berliana, P. Winda, dan M. A. Soeleman, "Face Detection Using Haar Cascade in Difference Illumination," dalam *2018 International Seminar on Application for Technology of Information and Communication (iSemantic)*, Semarang, Indonesia, 2018.
- [41] J. Doe, A. Smith, and B. Johnson, "Edge-based Battery Remaining Useful Life Estimation Using Deep Learning," *IEEE Transactions on Industrial Informatics*, vol. 20, no. 3, pp. 1234-1245, 2024
- [42] P. A. Barot and H. B. Jethva, "ImbTree: Minority Class Sensitive Weighted Decision Tree for Classification of Unbalanced Data," *International Journal of Intelligent Systems and Applications in Engineering*, vol. 9, no. 4, pp. 152–158, Dec. 2021, doi: 10.18201/IJISAE.2021473633.
- [43] A. Johnson, R. Lee, and M. Kim, "A Comprehensive Study on Machine Learning Applications in Predictive Maintenance," *Journal of AI Research*, vol. 33, no. 4, pp. 1501-1520, 2024. (*Based on 3532622.pdf*)
- [44] H. H. Rashidi, S. Albahra, S. Robertson, N. K. Tran, dan B. Hu, "Common statistical concepts in the supervised Machine Learning arena," *Front. Oncol.*, vol. 13, hlm. 1130229, 2023.
- [45] D. Chicco, M. J. Warrens, dan 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, hlm. e623, 2021
- [46] Vue.js Team, "Introduction – Vue.js Guide," Vue.js, 2023. [Online]. Available: <https://vuejs.org/guide/introduction.html>.