

## DAFTAR PUSTAKA

- Akiba, T., Sano, S., Yanase, T., Ohta, T., & Koyama, M. (2019). *Optuna: A next-generation hyperparameter optimization framework*. *arXiv preprint arXiv:1907.10902*. <https://arxiv.org/abs/1907.10902>
- Aldraimli, M., Soria, D., Parkinson, J., Thomas, E., Bell, J., Dwek, M., & Chausalet, T. (2020). Machine learning prediction of susceptibility to visceral fat associated diseases. *Health and Technology, 10*, 925-944. <https://doi.org/10.1007/s12553-020-00446-1>
- Alwhbi, I. A., Zou, C. C., & Alharbi, R. N. (2024). Encrypted Network Traffic Analysis and Classification Utilizing Machine Learning. *Sensors, 24*(11), 3509. <https://doi.org/10.3390/s24113509>
- Carillo, R., Cerasuolo, F., Bovenzi, G., Ciuonzo, D., & Pescapè, A. (2025). Explainable federated class incremental learning for encrypted network traffic classification. *Computer Networks, 269*, 111448. <https://doi.org/10.1016/j.comnet.2025.111448>
- Chen, C.-H., Lin, Y.-L., & Pai, P.-F. (2024). Forecasting Flower Prices by Long Short-Term Memory Model with Optuna. *Electronics, 13*(18), 3646. <https://doi.org/10.3390/electronics13183646>
- Hancock, J. T., Khoshgoftaar, T. M., & Johnson, J. M. (2023). *Evaluating classifier performance with highly imbalanced Big Data*. *Journal of Big Data, 10*, 42. <https://doi.org/10.1186/s40537-023-00724-5>
- Husain, G., Nasef, D., Jose, R., Mayer, J., Bekbolatova, M., Devine, T., & Toma, M. (2025). SMOTE vs. SMOTEENN: A Study on the Performance of Resampling Algorithms for Addressing Class Imbalance in Regression Models. *Algorithms, 18*(1), 37. <https://doi.org/10.3390/a18010037>
- Ismail, E., Gad, W., & Hashem, M. (2023). SMOTE-RUS: Combined oversampling and undersampling technique to classify the imbalanced autism spectrum disorder dataset. *International Journal of Intelligent Computing and Information Sciences, 23*, 83–94. <https://doi.org/10.21608/ijicis.2023.216833.1278>
- Jerabek, K., Luxemburk, J., Plyn, R., Koumar, J., Pesek, J., & Hynek, K. (2025). *When simple model just works: Is network traffic classification in crisis?* arXiv. <https://arxiv.org/abs/2506.08655>
- Jozsa, R., Hynek, K., & Pekar, A. (2025). *Taming volatility: Stable and private QUIC classification with federated learning*. *arXiv preprint arXiv:2509.09997*. <https://arxiv.org/abs/2509.09997>
- Jozsa, Richard, Karel Hynek, and Adrian Pekar. *Taming Volatility: Stable and Private QUIC Classification with Federated Learning*. 2025. arXiv, <https://arxiv.org/abs/2509.09997>
- Ke, G., Meng, Q., Finley, T., Wang, T., Chen, W., Ma, W., Ye, Q., & Liu, T.-Y. (2017). *LightGBM: A highly efficient gradient boosting decision tree*. In I. Guyon, U. Von Luxburg, S. Bengio, H. Wallach, R. Fergus, S. Vishwanathan, & R. Garnett (Eds.), *Advances in Neural Information Processing Systems* (Vol. 30). Curran Associates, Inc. [https://proceedings.neurips.cc/paper\\_files/paper/2017/file/6449f44a102fde848669bd9eb6b76fa-Paper.pdf](https://proceedings.neurips.cc/paper_files/paper/2017/file/6449f44a102fde848669bd9eb6b76fa-Paper.pdf)

- Kim, M., & Hwang, K. B. (2022). *An empirical evaluation of sampling methods for the classification of imbalanced data*. *PLOS ONE*, 17(7), e0271260. <https://doi.org/10.1371/journal.pone.0271260>
- Luxemburk, J., & Hynek, K. (2023, October). *DataZoo: Streamlining traffic classification experiments*. *arXiv preprint arXiv:2310.19568*. <https://doi.org/10.48550/arXiv.2310.19568>
- Luxemburk, J., Hynek, K., & Čejka, T. (2023). *Encrypted traffic classification: The QUIC case*. In *2023 7th Network Traffic Measurement and Analysis Conference (TMA)* (pp. 1-10). IEEE. <https://doi.org/10.23919/TMA58422.2023.10199052>
- Luxemburk, J., Hynek, K., Čejka, T., Lukačovič, A., & Šiška, P. (2023). *CESNET-QUIC22: A large one-month QUIC network traffic dataset from backbone lines*. *Data in Brief*, 46, 108888. <https://doi.org/10.1016/j.dib.2023.108888>
- Malashin, I., Martysyuk, D., Nelyub, V., Borodulin, A., Gantimurov, A., & Tynchenko, V. (2025). *Deep learning for property prediction of natural fiber polymer composites*. *Scientific Reports*, 15, Article 10841. <https://doi.org/10.1038/s41598-025-10841-1>
- McDermott, M. B. A., Zhang, H., Hansen, L. H., Angelotti, G., & Gallifant, J. (2025). *A closer look at AUROC and AUPRC under class imbalance*. *arXiv*. <https://arxiv.org/abs/2401.06091>
- Nespoli, L., & Medici, V. (2022). *Multivariate boosted trees and applications to forecasting and control*. *Journal of Machine Learning Research*, 23(246), 1-47. <http://jmlr.org/papers/v23/21-0247.html>
- Nugroho, Y., Zakiyabarsi, F., & Paramita, A. (2025). *Implementasi SMOTE-ENN dan Borderline SMOTE terhadap performa LightGBM pada imbalanced class*. *Rabit: Jurnal Teknologi dan Sistem Informasi Univrab*, 10(1), 51-59. <https://doi.org/10.36341/rabit.v10i1.5436>
- Perna, G., Trevisan, M., Giordano, D., & Drago, I. (2022). *A first look at HTTP/3 adoption and performance*. *Computer Communications*, 187, 115-124. <https://doi.org/10.1016/j.comcom.2022.02.005>
- Shanmugam, V., Razavi-Far, R., & Hallaji, E. (2025). *Addressing Class Imbalance in Intrusion Detection: A Comprehensive Evaluation of Machine Learning Approaches*. *Electronics*, 14(1), 69. <https://doi.org/10.3390/electronics14010069>
- Tharwat, A. (2021). *Classification assessment methods*. *Applied Computing and Informatics*, 17(1), 168-192. <https://doi.org/10.1016/j.aci.2018.08.003>
- Tuyishime, E., Martalò, M., Cotfas, P. A., Popescu, V., Cotfas, D. T., & Rekeraho, A. (2025). *Resource-Efficient Traffic Classification Using Feature Selection for Message Queuing Telemetry Transport-Internet of Things Network-Based Security Attacks*. *Applied Sciences*, 15(8), 4252. <https://doi.org/10.3390/app15084252>
- Wang, S., Ren, Y., & Xia, B. (2023). *Estimation of urban AQI based on interpretable machine learning*. *Environmental Science and Pollution Research*, 30, 1-13. <https://doi.org/10.1007/s11356-023-29336-5>
- Watanabe, S. (2025). *Tree-structured Parzen estimator: Understanding its algorithm components and their roles for better empirical performance*. *arXiv preprint arXiv:2304.11127*. <https://arxiv.org/abs/2304.11127>

- Widianto, S., & Teresia, A. (2024, June 24). Cyber attack compromised Indonesia data centre, ransom sought. *Reuters*. <https://www.reuters.com/technology/cybersecurity/cyber-attack-compromised-indonesia-data-centre-ransom-sought-reports-antara-2024-06-24/>
- Wishnuwardana, R. J., Omar, M. B., Zabiri, H. B., Faqih, M., Bingi, K., & Ibrahim, R. (2025). *Optuna-LightGBM: An Optuna hyperparameter optimization framework for the determination of solvent components in acid gas removal unit using LightGBM*. *Cleaner Engineering and Technology*, 28, 101054. <https://doi.org/10.1016/j.clet.2025.101054>
- Yang, F., Wang, K., Sun, L., Zhai, M., Song, J., & Wang, H. (2022). *A hybrid sampling algorithm combining synthetic minority over-sampling technique and edited nearest neighbor for missed abortion diagnosis*. *BMC Medical Informatics and Decision Making*, 22(1), 344. <https://doi.org/10.1186/s12911-022-02075-2>
- Zhang, B., Jiang, W., Zhu, Q., Liao, C., & Wang, W. (2025). *Research on lightweight network traffic service classification with interference traffic in large-scale networks*. *Computer Networks*, 111786. <https://doi.org/10.1016/j.comnet.2025.111786>
- Zhang, J., Zhao, H., Feng, Y., Cai, Z., & Zhu, L. (2025). *NetST: Network encrypted traffic classification based on Swin Transformer*. *Computers, Materials and Continua*, 84(3), 5279-5298. <https://doi.org/10.32604/cmc.2025.066367>
- Zhu, W., Zhang, H., Pei, C., & Li, J. (2025). *TrafficMAE: A network traffic classification model based on masked autoencoder*. *ICT Express*. Advance online publication. <https://doi.org/10.1016/j.ict.2025.11.004>
- Zyl V, Jean-Pierre, & Engelbrecht, A. P. (2025). *Analysis of classification metric behaviour under class imbalance*. *Egyptian Informatics Journal*, 31, 100711. <https://doi.org/10.1016/j.eij.2025.100711>