

DAFTAR PUSTAKA

- Ahsan, M. M., Luna, S. A., dan Siddique, Z. 2022. Machine-learning-based disease diagnosis: A comprehensive review. *Healthcare* Vol. 10, No. 3, No. Artikel: 541.
- Allgaier, J., dan Pryss, R. 2024. Cross-validation visualized: a narrative guide to advanced methods. *Machine Learning and Knowledge Extraction* Vol. 6, No. 2, Hal: 1378–1388.
- Anshul. 2021. *Gradient Boosting Algorithm: A Complete Guide for Beginners*. Analytics Vidhya. <https://www.analyticsvidhya.com/blog/2021/09/gradient-boosting-algorithm-a-complete-guide-for-beginners/> (diakses pada tanggal 15 Desember 2025)
- Babirye, S. R., Nsubuga, M., Mboowa, G., Batte, C., Galiwango, R., dan Kateete, D. P. 2024. Machine learning-based prediction of antibiotic resistance in Mycobacterium tuberculosis clinical isolates from Uganda. *BMC Infectious Diseases* Vol. 24, No. 1, No. Artikel: 1391.
- Breiman, L., Friedman, J.H., Olshen, R.A., dan Stone, C.J. 1984. *Classification and Regression Trees*. New York: Chapman & Hall.
- Brownlee, J. 2020. *A Gentle Introduction to Threshold-Moving for Imbalanced Classification*. Machine Learning Mastery. <https://machinelearningmastery.com/threshold-moving-for-imbalanced-classification/> (diakses pada tanggal 10 Desember 2025)
- Chen, J., Jiang, Y., Li, Z., Zhang, M., Liu, L., Li, A., dan Lu, H. 2024. Predictive machine learning models for anticipating loss to follow-up in tuberculosis patients throughout anti-TB treatment journey. *Scientific Reports* Vol. 14, No. Artikel: 24685.
- De'ath, G., dan Fabricius, K.E. 2000. Classification and regression trees: A powerful yet simple technique for ecological data analysis. *Ecology* Vol. 81, No. 11, Hal: 3178–3192.
- Delgado-Panadero, Á., Hernández-Lorca, B., García-Ordás, M. T., dan Benítez-Andrades, J. A. 2022. Implementing local-explainability in gradient boosting trees: feature contribution. *Information Sciences* Vol. 589, Hal: 199–212.
- Elreedy, D., Atiya, A. F., dan Kamalov, F. 2024. A theoretical distribution analysis of synthetic minority oversampling technique (SMOTE) for imbalanced learning. *Machine Learning* Vol. 113, No. 7, Hal: 4903–4923.
- Feretzakis, G., Sakagianni, A., Anastasiou, A., Kapogianni, I., Bazakidou, E., Koufopoulos, P., Koumpouros, Y., Koufopoulou, C., Kaldis, V., dan Verykios, V. S. 2024. Integrating Shapley values into machine learning techniques for enhanced predictions of hospital admissions. *Applied Sciences* Vol. 14, No. 13, No. Artikel: 5925.
- Friedman, J. H. 2001. Greedy Function Approximation: A Gradient Boosting Machine. *The Annals of Statistics* Vol. 29, No. 5, Hal: 1189–1232.

- GeeksforGeeks.org. 2025. *Explainable Artificial Intelligence (XAI)*. <https://www.geeksforgeeks.org/artificial-intelligence/explainable-artificial-intelligencexai/> (diakses pada tanggal 15 Desember 2025)
- Géron, A. 2022. *Hands-on machine learning with Scikit-Learn, Keras, and TensorFlow*. Sebastopol: O'Reilly Media, Inc.
- Gorunescu, F. 2011. *Data Mining: Concepts, Models and Techniques*. Berlin: Springer-Verlag Berlin Heidelberg.
- Harmoni, Y. S. B., Hindrayani, K. M., dan Prasetya, D. A. 2025. Optimizing Categorical Boosting Model with Optuna for Anti-Tuberculosis Drugs Classification. *Indonesian Journal of Electronics, Electromedical Engineering, and Medical Informatics* Vol. 7, No. 2, Hal: 401–414.
- Hasan, M. M. 2023. Understanding model predictions: a comparative analysis of SHAP and LIME on various ML algorithms. *Journal of Scientific and Technological Research* Vol. 5, No. 1, Hal: 17–26.
- Hossain, M. S., Khandocar, M. P., Riti, F. A., Ali, M. Y., Dey, P. R., Haque, S. M. J., Metouekel, A., Mengistie, A. A., Bourhia, M., dan Khallouki, F. 2025. A comprehensive machine learning for high throughput Tuberculosis sequence analysis, functional annotation, and visualization. *Scientific Reports* Vol. 15, No. 1, No. Artikel: 25866.
- Kementerian Kesehatan Republik Indonesia. 2024. *Laporan Program Penanggulangan Tuberkulosis Tahun 2023*. Jakarta: Kementerian Kesehatan Republik Indonesia.
- Kementerian Kesehatan Republik Indonesia. 2020. *Strategi nasional penanggulangan tuberkulosis di Indonesia tahun 2020-2024*. Jakarta: Kementerian Kesehatan Republik Indonesia.
- Klusowski, J. M. 2019. Analyzing CART. *ArXiv Preprint ArXiv:1906.10086*.
- Lewis, R. J., dan Roger, J. 2000. An Introduction to Classification and Regression Tree (CART) Analysis. *Proceeding of the 2000 Annual Meeting of the Society for Academic Emergency Medicine*, San Francisco: 22-25 May 2000.
- Lundberg, S. M., dan Lee, S.-I. 2017. A unified approach to interpreting model predictions. *Proceedings of Advances in Neural Information Processing Systems* Vol. 30.
- Maulana, D. J., Saadah, S., dan Yunanto, P. E. 2024. Kmeans-SMOTE integration for handling imbalance data in classifying financial distress companies using SVM and Naïve Bayes. *Jurnal RESTI (Rekayasa Sistem Dan Teknologi Informasi)* Vol. 8, No. 1, Hal: 54–61.
- McGrath, A., dan Jonker, A. 2024. *Interpretability*. IBM. <https://www.ibm.com/id-id/think/topics/interpretability> (diakses pada tanggal 15 Desember 2025)
- Molnar, C. 2020. *Interpretable machine learning*. Raleigh: Lulu Press.
- Mukherjee, M., dan Khushi, M. 2021. SMOTE-ENC: A novel SMOTE-based method to generate synthetic data for nominal and continuous features. *Applied System Innovation* Vol. 4, No. 1, No. Artikel: 18.

- Pinem, J., Astuti, W., dan Adiwijaya, A. 2025. Explainable Ensemble Learning Framework with SMOTE, SHAP and LIME for Predicting 30-Day Readmission in Diabetic Patients. *Jurnal RESTI (Rekayasa Sistem dan Teknologi Informasi)* Vol. 9, No. 5, Hal: 983–990.
- Qiao, H., Chen, Y., Qian, C., dan Guo, Y. 2024. Clinical data mining: challenges, opportunities, and recommendations for translational applications. *Journal of Translational Medicine* Vol. 22, No. 1, Hal: 185.
- Rokach, L., dan Maimon, O. 2015. *Data Mining with Decision Trees: Theory and Applications (2nd ed.)*. Singapore: World Scientific Publishing.
- Samek, W., Wiegand, T., dan Müller, K.-R. 2017. Explainable artificial intelligence: Understanding, visualizing and interpreting deep learning models. *ArXiv Preprint ArXiv:1708.08296*.
- Suryotrisongko, H. 2021. *Interpretable Machine Learning*. Surabaya: PT. ITS Tekno Sains. <https://www.its.ac.id/it/xai-explainable-artificial-intelligence-ai/> (diakses pada tanggal 15 Desember 2025)
- Vimbi, V., Shaffi, N., dan Mahmud, M. 2024. Interpreting artificial intelligence models: a systematic review on the application of LIME and SHAP in Alzheimer’s disease detection. *Brain Informatics* Vol. 11, No. 1, No. Artikel: 10.
- Wang, Z., Guo, Z., Wang, W., Zhang, Q., Song, S., Xue, Y., Zhang, Z., dan Wang, J. 2025. Prediction of tuberculosis treatment outcomes using biochemical makers with machine learning. *BMC Infectious Diseases* Vol. 25, No. 1, Hal: 1–9.
- World Health Organization. 2024a. *Global tuberculosis report 2024*. Geneva: World Health Organization.
- World Health Organization. 2024b. *Laporan hasil studi inventori tuberkulosis Indonesia 2023-2024*. Geneva: World Health Organization
- Yao, B., Yu, X., Qiu, L., Gu, E., Mao, S., Jiang, L., Tong, J., dan Wu, J. 2025. Interpretable noninvasive diagnosis of tuberculous pleural effusion using LGBM and SHAP: development and clinical application of a machine learning model. *PeerJ* Vol. 13, No. Artikel: e19411.