

DAFTAR PUSTAKA

- Alkhanbouli, R., Matar Abdulla Almadhaani, H., Alhosani, F., & Simsekler, M. C. E. (2025). The role of explainable artificial intelligence in disease prediction: a systematic literature review and future research directions. In *BMC Medical Informatics and Decision Making* (Vol. 25, Number 1). BioMed Central Ltd. <https://doi.org/10.1186/s12911-025-02944-6>
- Alqahtani, A., Alsubai, S., Sha, M., Vilcekova, L., & Javed, T. (2022). Cardiovascular Disease Detection using Ensemble Learning. *Computational Intelligence and Neuroscience*, 2022. <https://doi.org/10.1155/2022/5267498>
- Anshori, M., Rikatsih, N., Syauqi Haris, M., Sains, F., dan Kesehatan, T., & RSDR Soepraoen Kesdam, I. V. (2022). Prediksi Pasien Dengan Penyakit Kardiovaskular Menggunakan Random Forest. In *Jurnal TEKTRIKA* (Vol. 7, Number 2).
- Ashmore, R., Calinescu, R., & Paterson, C. (2019). *Assuring the Machine Learning Lifecycle: Desiderata, Methods, and Challenges*. <http://arxiv.org/abs/1905.04223>
- Azizan, C. P., Andini, D., & Azzahra, M. (2023). Analisis Perbandingan Metode Klasifikasi Menggunakan Regresi Logistik Biner, Random Forest, dan Support Vector Machine pada Cardiovascular Disease Dataset. *Jurnal Inferensi*. <https://www.kaggle.com/datasets/sulianova/cardiovascular-disease->
- Azmi, J., Arif, M., Nafis, M. T., Alam, M. A., Tanweer, S., & Wang, G. (2022). A systematic review on machine learning approaches for cardiovascular disease prediction using medical big data. *Medical Engineering and Physics*, 105. <https://doi.org/10.1016/j.medengphy.2022.103825>
- Badan Kebijakan Pembangunan Kesehatan (BKPK) Kemenkes. (2023). *Survei Kesehatan Indonesia (SKI) 2023*.
- Badillo, S., Banfai, B., Birzele, F., Davydov, I. I., Hutchinson, L., Kam-Thong, T., Siebourg-Polster, J., Steiert, B., & Zhang, J. D. (2020). An Introduction to Machine Learning. *Clinical Pharmacology and Therapeutics*, 107(4), 871–885. <https://doi.org/10.1002/cpt.1796>
- Balakrishnan, M., Arockia Christopher, A. B., Ramprakash, P., & Logeswari, A. (2021). Prediction of Cardiovascular Disease using Machine Learning. *Journal of Physics: Conference Series*, 1767(1). <https://doi.org/10.1088/1742-6596/1767/1/012013>
- Bill, T., & Lakshmi, M. (2024). A review on coronary artery disease. *Journal of Applied Biotechnology & Bioengineering*, 11(4), 113–128. <https://doi.org/10.15406/jabb.2024.11.00368>
- Bischl, B., Binder, M., Lang, M., Pielok, T., Richter, J., Coors, S., Thomas, J., Ullmann, T., Becker, M., Boulesteix, A. L., Deng, D., & Lindauer, M. (2023). Hyperparameter optimization: Foundations, algorithms, best practices, and open challenges. In *Wiley Interdisciplinary Reviews: Data Mining and Knowledge Discovery* (Vol. 13, Number 2). John Wiley and Sons Inc. <https://doi.org/10.1002/widm.1484>
- Choi, J. H., Choi, Y., Lee, K. S., Ahn, K. H., & Jang, W. Y. (2024). Explainable Model Using Shapley Additive Explanations Approach on Wound Infection after Wide Soft Tissue Sarcoma Resection: “Big Data” Analysis Based on Health Insurance Review and

- Assessment Service Hub. *Medicina (Lithuania)*, 60(2).
<https://doi.org/10.3390/medicina60020327>
- Christina Magnussen, M. D., Francisco M. Ojeda, Ph. D. , Darryl P. Leong, M. B. , B. S. , Ph. D., Jesus Alegre-Diaz, M. D., Philippe Amouyel, M. D. , Ph. D. , & etc. (2023). Global Effect of Modifiable Risk Factors on Cardiovascular Disease and Mortality. *New England Journal of Medicine*, 389(14), 1273–1285.
<https://doi.org/10.1056/NEJMoa2206916>
- Ciumărnean, L., Milaciu, M. V., Negrean, V., Orășan, O. H., Vesa, S. C., Sălăgean, O., Iluț, S., & Vlaicu, S. I. (2022). Cardiovascular risk factors and physical activity for the prevention of cardiovascular diseases in the elderly. In *International Journal of Environmental Research and Public Health* (Vol. 19, Number 1). MDPI.
<https://doi.org/10.3390/ijerph19010207>
- Dadiyala, C., Saxena, A. A., Kale, K. A., Bhattad, K. A., Sheikh, N. T. S., & Priyanshi. (2024). Progressive Heart Disease Prediction Model Using Machine Learning: A Comprehensive Staging Approach. *International Conference on Smart Systems for Applications in Electrical Sciences, ICSSSES 2024*.
<https://doi.org/10.1109/ICSSSES62373.2024.10561373>
- Dalal, S., Goel, P., Onyema, E. M., Alharbi, A., Mahmoud, A., Algarni, M. A., & Awal, H. (2023). Application of Machine Learning for Cardiovascular Disease Risk Prediction. *Computational Intelligence and Neuroscience*, 2023(1).
<https://doi.org/10.1155/2023/9418666>
- Dhanka, S., & Maini, S. (2025). A hybridization of XGBoost machine learning model by Optuna hyperparameter tuning suite for cardiovascular disease classification with significant effect of outliers and heterogeneous training datasets. *International Journal of Cardiology*, 420. <https://doi.org/10.1016/j.ijcard.2024.132757>
- Dritsas, E., Alexiou, S., & Moustakas, K. (2022). Cardiovascular Disease Risk Prediction with Supervised Machine Learning Techniques. *International Conference on Information and Communication Technologies for Ageing Well and E-Health, ICT4AWE - Proceedings*, 315–321. <https://doi.org/10.5220/0011088300003188>
- Effati, S., Kamarzardi-Torghabe, A., Azizi-Froutaghe, F., Atighi, I., & Ghiasi-Hafez, S. (2024). Web application using machine learning to predict cardiovascular disease and hypertension in mine workers. *Scientific Reports*, 14(1).
<https://doi.org/10.1038/s41598-024-80919-9>
- El Haber, E., Sawaya, E., Attieh, M., Tannous, A., Ghazaly, W., & Owayjan, M. (2025). Formula 1 Race Winner Prediction Using Random Forest and SHAP Analysis. *2025 International Conference on Control, Automation, and Instrumentation, IC2AI 2025*.
<https://doi.org/10.1109/IC2AI62984.2025.10932140>
- Fadli, M., & Saputra, R. A. (2023). Klasifikasi dan Evaluasi Performa Model Random Forest untuk Prediksi Stroke. *Jurnal Teknik*, 12. <http://jurnal.umt.ac.id/index.php/jt/index>
- Ghosh, P., Azam, S., Jonkman, M., Karim, A., Shamrat, F. M. J. M., Ignatious, E., Shultana, S., Beeravolu, A. R., & De Boer, F. (2021). Efficient prediction of cardiovascular disease using machine learning algorithms with relief and lasso feature selection techniques. *IEEE Access*, 9, 19304–19326.
<https://doi.org/10.1109/ACCESS.2021.3053759>

- Golazad, S. Z., Mohammadi, A., Rashidi, A., & Ilbeigi, M. (2024). From raw to refined: Data preprocessing for construction machine learning (ML), deep learning (DL), and reinforcement learning (RL) models. In *Automation in Construction* (Vol. 168). Elsevier B.V. <https://doi.org/10.1016/j.autcon.2024.105844>
- Guan, X., & Burton, H. (2022). Bias-variance tradeoff in machine learning: Theoretical formulation and implications to structural engineering applications. *Structures*, 46, 17–30. <https://doi.org/10.1016/j.istruc.2022.10.004>
- Haganta Depari, D., Widiastiwi, Y., Mega Santoni, M., Ilmu Komputer, F., Pembangunan Nasional Veteran Jakarta, U., Fatmawati Raya, J. R., & Labu, P. (2022). Perbandingan Model Decision Tree, Naive Bayes dan Random Forest untuk Prediksi Klasifikasi Penyakit Jantung. *JURNAL INFORMATIK Edisi Ke*, 18, 2022.
- Hakim, B. (2021). Analisa Sentimen Data Text Preprocessing Pada Data Mining Dengan Menggunakan Machine Learning. *JBASE - Journal of Business and Audit Information Systems*, 4(2). <https://doi.org/10.30813/jbase.v4i2.3000>
- Huang, H. N., Chen, H. M., Lin, W. W., Huang, C. J., Chen, Y. C., Wang, Y. H., & Yang, C. T. (2023). Employing feature engineering strategies to improve the performance of machine learning algorithms on echocardiogram dataset. *Digital Health*, 9. <https://doi.org/10.1177/20552076231207589>
- Ibrahim, M. (2023). Evolution of Random Forest from Decision Tree and Bagging: A Bias-Variance Perspective. *Dhaka University Journal of Applied Science and Engineering*, 7(1), 66–71. <https://doi.org/10.3329/dujase.v7i1.62888>
- Jaouja Maiga, Gilbert Gutabaga Hungilo, & Pranowo. (2019). Comparison of Machine Learning Models in Prediction of Cardiovascular Disease Using Health Record Data. *International Conference on Informatics, Multimedia, Cyber and Information System (ICIMCIS)*.
- Kaminsky, L. A., German, C., Imboden, M., Ozemek, C., Peterman, J. E., & Brubaker, P. H. (2022). The importance of healthy lifestyle behaviors in the prevention of cardiovascular disease. In *Progress in Cardiovascular Diseases* (Vol. 70, pp. 8–15). W.B. Saunders. <https://doi.org/10.1016/j.pcad.2021.12.001>
- Khan, A. A., Chaudhari, O., & Chandra, R. (2024). A review of ensemble learning and data augmentation models for class imbalanced problems: Combination, implementation and evaluation. In *Expert Systems with Applications* (Vol. 244). Elsevier Ltd. <https://doi.org/10.1016/j.eswa.2023.122778>
- Maharani, A., Sujarwoto, Praveen, D., Oceandy, D., Tampubolon, G., & Patel, A. (2024). Implementation of mobile-health technology is associated with five-year survival among individuals in rural areas of Indonesia. *PLOS Digital Health*, 3(4). <https://doi.org/10.1371/journal.pdig.0000476>
- Miranda, E., Adiarto, S., Bhatti, F. M., Zakiyyah, A. Y., Aryuni, M., & Bernando, C. (2023). Understanding Arteriosclerotic Heart Disease Patients Using Electronic Health Records: A Machine Learning and Shapley Additive exPlanations Approach. *Healthcare Informatics Research*, 29(3), 228–238. <https://doi.org/10.4258/hir.2023.29.3.228>
- Mohammed, A., & Kora, R. (2023). A comprehensive review on ensemble deep learning: Opportunities and challenges. In *Journal of King Saud University - Computer and*

- Information Sciences* (Vol. 35, Number 2, pp. 757–774). King Saud bin Abdulaziz University. <https://doi.org/10.1016/j.jksuci.2023.01.014>
- Nematzadeh, S., Kiani, F., Torkamanian-Afshar, M., & Aydin, N. (2022). Tuning hyperparameters of machine learning algorithms and deep neural networks using metaheuristics: A bioinformatics study on biomedical and biological cases. *Computational Biology and Chemistry*, 97. <https://doi.org/10.1016/j.compbiochem.2021.107619>
- Pal, M., & Parija, S. (2021). Prediction of Heart Diseases using Random Forest. *Journal of Physics: Conference Series*, 1817(1). <https://doi.org/10.1088/1742-6596/1817/1/012009>
- Pandey, V., Lilhore, U. K., & Walia, R. (2025). A systematic review on cardiovascular disease detection and classification. *Biomedical Signal Processing and Control*, 102. <https://doi.org/10.1016/j.bspc.2024.107329>
- Rahim, A., Rasheed, Y., Azam, F., Anwar, M. W., Rahim, M. A., & Muzaffar, A. W. (2021). An Integrated Machine Learning Framework for Effective Prediction of Cardiovascular Diseases. *IEEE Access*, 9, 106575–106588. <https://doi.org/10.1109/ACCESS.2021.3098688>
- Reddy, S. D., Lohitha, S., & Shaik, F. (2023). Machine Learning based Mobile App for Heart Disease Prediction. *International Conference on Innovative Data Communication Technologies and Application, ICIDCA 2023 - Proceedings*, 464–470. <https://doi.org/10.1109/ICIDCA56705.2023.10099714>
- Rosidah, N., & Prathivi, R. (2025). Optimasi Metode Random Forest Untuk Klasifikasi Risiko Obesitas Berdasarkan Pola Makan. *Jurnal Informatika Teknologi Dan Sains*, 7(1), 56–62.
- Salwa Alexita, A. C., Kusumaningtyas, P., & Rofi'i, M. (2025). Optimasi Algoritma Random Forest Menggunakan Pso Untuk Klasifikasi Kanker Payudara Dengan Citra Mammograms. *Teknika STTKD: Jurnal Teknik, Elektronik, Engine*, 11(1), 47–54. <https://doi.org/10.56521/teknika.v11i1.1346>
- Sharma, C., Sharma, S., Sharma, K., Sethi, G. K., & Chen, H. Y. (2024). Exploring explainable AI: a bibliometric analysis. *Discover Applied Sciences*, 6(11). <https://doi.org/10.1007/s42452-024-06324-z>
- Staff of WHO. (2021, June 11). *Cardiovascular diseases (CVDs)*. [https://www.who.int/news-room/fact-sheets/detail/cardiovascular-diseases-\(cvds\)](https://www.who.int/news-room/fact-sheets/detail/cardiovascular-diseases-(cvds))
- Sumwiza, K., Twizere, C., Rushingabigwi, G., Bakunzibake, P., & Bamurigire, P. (2023). Enhanced cardiovascular disease prediction model using random forest algorithm. *Informatics in Medicine Unlocked*, 41. <https://doi.org/10.1016/j.imu.2023.101316>
- Sun, Z., Wang, G., Li, P., Wang, H., Zhang, M., & Liang, X. (2024). An improved random forest based on the classification accuracy and correlation measurement of decision trees. *Expert Systems with Applications*, 237. <https://doi.org/10.1016/j.eswa.2023.121549>
- Svetlana Ulianova. (2019). *Kaggle Dataset, 'Cardiovascular Disease dataset'*. <https://www.kaggle.com/Sulianova/Cardiovascular-Disease-Dataset>

- Teo, K. K., & Rafiq, T. (2021). Cardiovascular Risk Factors and Prevention: A Perspective From Developing Countries. In *Canadian Journal of Cardiology* (Vol. 37, Number 5, pp. 733–743). Elsevier Inc. <https://doi.org/10.1016/j.cjca.2021.02.009>
- Tusongtuoheti, X., Shu, Y., Huang, G., & Mao, Y. (2024). Predicting the risk of subclinical atherosclerosis based on interpretable machine models in a Chinese T2DM population. *Frontiers in Endocrinology*, 15. <https://doi.org/10.3389/fendo.2024.1332982>
- Vimbi, V., Shaffi, N., & Mahmud, M. (2024). Interpreting artificial intelligence models: a systematic review on the application of LIME and SHAP in Alzheimer's disease detection. In *Brain Informatics* (Vol. 11, Number 1). Springer Science and Business Media Deutschland GmbH. <https://doi.org/10.1186/s40708-024-00222-1>
- Wilimitis, D., & Walsh, C. G. (2023). Practical Considerations and Applied Examples of Cross-Validation for Model Development and Evaluation in Health Care: Tutorial. *JMIR AI*, 2(1). <https://doi.org/10.2196/49023>
- Yang, L., Wu, H., Jin, X., Zheng, P., Hu, S., Xu, X., Yu, W., & Yan, J. (2020). Study of cardiovascular disease prediction model based on random forest in eastern China. *Scientific Reports*, 10(1). <https://doi.org/10.1038/s41598-020-62133-5>
- Yang, Y., & Wang, H. (2025). Random Forest-Based Machine Failure Prediction: A Performance Comparison. *Applied Sciences (Switzerland)*, 15(16). <https://doi.org/10.3390/app15168841>
- Zobair, K. M., Houghton, L., Tjondronegoro, D., Sanzogni, L., Islam, M. Z., Sarker, T., & Islam, M. J. (2023). Systematic review of Internet of medical things for cardiovascular disease prevention among Australian first nations. In *Heliyon* (Vol. 9, Number 11). Elsevier Ltd. <https://doi.org/10.1016/j.heliyon.2023.e22420>

SEKOLAH PASCASARJANA