

## DAFTAR PUSTAKA

- [1] BNPB, “Data Kejadian Bencana Indonesia Tahun 2024,” Jakarta, 2024.
- [2] Y. S. M. Simanjuntak, R. Suwarman, dan R. Edi, “Analisis Karakteristik Curah Hujan Penyebab Banjir Berdurasi Panjang (Studi Kasus: Banjir Tahun 2019 di Baleendah, Jawa Barat),” *Jurnal Sumber Daya Air*, vol. 19, no. 1, hlm. 29–41, Mei 2023, doi: 10.32679/jsda.v19i1.821.
- [3] Sukono, M. Hidayanti, J. Nahar, R. A. Ibrahim, M. D. Johansyah, dan N. Zamri, “An Alternative Source of Funding to Mitigate Flood Losses through Bonds: A Model for Pricing Flood Bonds in Indonesian Territory,” *Water (Basel)*, vol. 16, no. 15, hlm. 2102, Jul 2024, doi: 10.3390/w16152102.
- [4] Badan Pusat Statistik Kabupaten Bandung, “Kecamatan Dayeuhkolot Dalam Angka 2024,” Bandung, 2024. [Daring]. Tersedia pada: <https://bandungkab.bps.go.id/id/publication/2024/09/26/5a8004c99a7bcccc02a29753/kecamatan-dayeuhkolot-dalam-angka-2024.html>
- [5] Moch Taufik, “Hubungan Sosial Ekonomi terhadap Perilaku Menangani Limbah Domestik di Sekitar Ci Sangkuy,” Universitas Pendidikan Indonesia, Bandung, 2018. Diakses: 18 Oktober 2024. [Daring]. Tersedia pada: <http://repository.upi.edu/id/eprint/45973>
- [6] Dikdik Ripaldi, “Banjir di Kabupaten Bandung Rendam 7.364 Rumah, Terparah di Baleendah & Dayeuhkolot,” Merdeka.com. [Daring]. Tersedia pada: <https://www.merdeka.com/peristiwa/banjir-di-kabupaten-bandung-rendam-7364-rumah-terparah-di-baleendah-amp-dayeuhkolot.html>
- [7] Putut Trihusodo, “Menggiring Air Limpasan Sungai Citarum ke Kolam Retensi,” Indonesia.go.id. Diakses: 18 Oktober 2024. [Daring]. Tersedia pada: <https://indonesia.go.id/kategori/budaya/6039/menggiring-air-limpasan-sungai-citarum-ke-kolam-retensi>
- [8] Fajar Hartawan, “Analisis Angka Kebutuhan Nyata Biaya Operasional Pengelolaan Stasiun Pompa Sistem Drainase Polder Kali Semarang,” Universitas Islam Sultan Agung Semarang, Semarang, 2021. Diakses: 22 Oktober 2024. [Daring]. Tersedia pada: <https://repository.unissula.ac.id/20535/>

- [9] A. Firmanto<sup>1</sup>, U. Lasminto<sup>2</sup>, dan T. S. Sidharti<sup>2</sup>, “Seminar Nasional Teknik Sipil V Tahun 2015-UMS”.
- [10] Kementerian Pekerjaan Umum dan Perumahan Rakyat, “Rencana Pengelolaan Sumber Daya Air Wilayah Sungai Bengawan Solo,” 2015.
- [11] Gilang Mahendra, “Rancang Bangun Kontrol Pintu Air dan Monitoring Ketinggian Air Sungai Berbasis Internet of Things IoT,” *Jurnal Teknik Elektro Indonesia*, vol. 2, 2021.
- [12] Kementerian Pekerjaan Umum dan Perumahan Rakyat dan Badan Pengembangan Sumber Daya Manusia, *Modul 4: Perencanaan Sistem Polder dan Kolam Retensi*. Bandung, Indonesia: Pusat Pendidikan dan Pelatihan Jalan, Perumahan, Permukiman dan Pengembangan Infrastruktur Wilayah.
- [13] N. H. Motlagh, M. Mohammadrezaei, J. Hunt, dan B. Zakeri, “Internet of things (IoT) and the energy sector,” 2020, *MDPI AG*. doi: 10.3390/en13020494.
- [14] H. R. C. Arante, E. Sybingco, M. A. Roque, L. Ambata, A. Chua, dan A. N. Gutierrez, “Development of a Secured IoT-Based Flood Monitoring and Forecasting System Using Genetic-Algorithm-Based Neuro-Fuzzy Network,” *Sensors*, vol. 25, no. 13, hlm. 3885, Jun 2025, doi: 10.3390/s25133885.
- [15] C. Mydlarz *dkk.*, “FloodNet: Low-Cost Ultrasonic Sensors for Real-Time Measurement of Hyperlocal, Street-Level Floods in New York City,” *Water Resour Res*, vol. 60, no. 5, Mei 2024, doi: 10.1029/2023WR036806.
- [16] Espressif, *ESP32 Series Datasheet*. 2025. [Daring]. Tersedia pada: [https://www.espressif.com/sites/default/files/documentation/esp32\\_datasheet\\_en.pdf](https://www.espressif.com/sites/default/files/documentation/esp32_datasheet_en.pdf)
- [17] Firebase, “Firebase Realtime Database.” [Daring]. Tersedia pada: <https://firebase.google.com/docs/database>
- [18] BOQ Instrument, “The Impact of Tank Material on Ultrasonic Water Level Sensor Accuracy.” Diakses: 4 Juli 2025. [Daring]. Tersedia pada: <https://www.boqinstrument.com/the-impact-of-tank-material-on-ultrasonic-water-level-sensor-accuracy.html>
- [19] Douglas C. Montgomery, *Statistical Quality Control*, 7th ed. Wiley, 2012.

- [20] M. I. M. Yusoff, "Machine Learning: An Overview," *Open Journal of Modelling and Simulation*, vol. 12, no. 03, hlm. 89–99, 2024, doi: 10.4236/ojmsi.2024.123006.
- [21] Q. Wang dan W. Abdelrahman, "High-Precision AI-Enabled Flood Prediction Integrating Local Sensor Data and 3rd Party Weather Forecast," *Sensors*, vol. 23, no. 6, Mar 2023, doi: 10.3390/s23063065.
- [22] X. Tian, Y. Guan, dan S. Wang, "Data Transformation in the Predict-Then-Optimize Framework: Enhancing Decision Making under Uncertainty," *Mathematics*, vol. 11, no. 17, Sep 2023, doi: 10.3390/math11173782.
- [23] C. Sauer, A.-L. Boulesteix, L. Hanßum, F. Hodiament, C. Bausewein, dan T. Ullmann, "Beyond algorithm hyperparameters: on preprocessing hyperparameters and associated pitfalls in machine learning applications," Des 2024, [Daring]. Tersedia pada: <http://arxiv.org/abs/2412.03491>
- [24] S. Han, K. Kim, dan S. Jung, "Subspace Recovery in Winsorized PCA: Insights into Accuracy and Robustness," Feb 2025, [Daring]. Tersedia pada: <http://arxiv.org/abs/2502.16391>
- [25] M. Zheng, J. Templin, A. Ariel, L. Hoffman, dan W.-C. Lee, "Using Data Preprocessing Techniques and Machine Learning Algorithms to Explore Predictors of Word Difficulty in English Language Assessment," 2024.
- [26] C. Mccarter, "The Kernel Density Integral Transformation."
- [27] D. M. Hawkins, "Quantile-Quantile Methodology-Detailed Results", doi: 10.48550/arXiv.2303.03215.
- [28] F. Habibzadeh, "Data Distribution: Normal or Abnormal?," *J Korean Med Sci*, vol. 39, no. 3, 2024, doi: 10.3346/jkms.2024.39.e35.
- [29] M. L. Edamo, E. G. Ayele, T. Yisihak Ukumo, A. Alemayehu Kassaye, dan A. Paulos Haile, "Capability of logistic regression in identifying flood-susceptible areas in a small watershed," *H2Open Journal*, vol. 7, no. 5, hlm. 351–374, Sep 2024, doi: 10.2166/h2oj.2024.024.
- [30] Sandaru G. M. C. dan Illeperuma I. A. K. S., "Flood Susceptibility Modeling Using Logistic Regression in QGIS Environment," *International Journal of Water Resources Engineering*, vol. 11, no. 01, hlm. 1–11, Feb 2025.

- [31] J. Liu *dkk.*, “Assessment of Flood Susceptibility Using Support Vector Machine in the Belt and Road Region,” 25 Mei 2021. doi: 10.5194/nhess-2021-80.
- [32] J. Wang, J. Sanderson, S. Iqbal, dan W. L. Woo, “Accelerated and Interpretable Flood Susceptibility Mapping Through Explainable Deep Learning with Hydrological Prior Knowledge,” *Remote Sens (Basel)*, vol. 17, no. 9, hlm. 1540, Apr 2025, doi: 10.3390/rs17091540.
- [33] C. M. L. Hughes, Y. Zhang, A. Pourhossein, dan T. Jurasova, “A comparative analysis of binary and multi-class classification machine learning algorithms to detect current frailty status using the English longitudinal study of ageing (ELSA),” *Frontiers in Aging*, vol. 6, Apr 2025, doi: 10.3389/fragi.2025.1501168.
- [34] M. Rondinone *dkk.*, “Assessing Flood and Landslide Susceptibility Using XGBoost: Case Study of the Basento River in Southern Italy,” *Applied Sciences*, vol. 15, no. 10, hlm. 5290, Mei 2025, doi: 10.3390/app15105290.
- [35] Z. Zhang, D. Wang, X. Wu, Y. Mei, J. Qiu, dan J. Zhu, “Unveiling flood-generating mechanisms using circular statistics-based machine learning approach without the need for discharge data during inference,” *Hydrology Research*, vol. 54, no. 10, hlm. 1181–1195, Nov 2023, doi: 10.2166/nh.2023.058.
- [36] U. Thapa, B. M. Pati, S. Thapa, D. Pyakurel, dan A. Shrestha, “Comparative Analysis on Snowmelt-Driven Streamflow Forecasting Using Machine Learning Techniques,” Apr 2024, doi: 10.3390/w16152095.
- [37] V. Miftahuljannah dan A. Suharso, “Pengimplementasian Berbagai Web Berdasarkan Kebutuhan Pengguna Dengan Menggunakan Metode Systematic Literature Review,” *INFOTECH journal*, vol. 9, no. 2, hlm. 401–405, Agu 2023, doi: 10.31949/infotech.v9i2.6341.
- [38] K. Trikusuma Dewo, V. Yasin, T. Budiman, A. Zulkarnain Sianipar, dan A. Budi Yulianto, “IT Infrastructure Dashboard Monitoring Application Development Using Grafana and Prometheus, a Case Study at Astra Polytechnic School,” dalam *2023 IEEE International Conference of Computer Science and Information Technology: The Role of Artificial Intelligence Technology in Human and Computer Interactions in the Industrial Era 5.0, ICOSNIKOM 2023*, Institute of Electrical and Electronics Engineers Inc., 2023. doi: 10.1109/ICoSNIKOM60230.2023.10364485.

- [39] M. Holjevac dan T. Jakopc, “Web application dashboards as a tool for data visualization and enrichment,” dalam *2020 43rd International Convention on Information, Communication and Electronic Technology, MIPRO 2020 - Proceedings*, Institute of Electrical and Electronics Engineers Inc., Sep 2020, hlm. 1740–1745. doi: 10.23919/MIPRO48935.2020.9245289.
- [40] E. Venkata, R. Chintla, K. Kumar Agrawal, dan E. S. Jain, “802.11 Wi-Fi Standards: Performance Metrics,” 2022.
- [41] S. Turangga dan Y. Arie, “Analisis Internet Menggunakan Parameter Quality Of Service Pada Alfamart Tuparev 70,” 2022.
- [42] “Telecommunications and Internet Protocol Harmonization Over Networks (TIPHON); General aspects of Quality of Service (QoS),” 1999. [Daring]. Tersedia pada: <http://www.etsi.org>
- [43] M. Hasbi dan N. R. Saputra, “Analisis Quality Of Service (Qos) Jaringan Internet Kantor Pusat King Bukopin Dengan Menggunakan Wireshark,” 2021. [Daring]. Tersedia pada: <https://jurnal.umj.ac.id/index.php/just-it/index>
- [44] H. Idwan, T. Y. Arif, dan R. Munadi, “Analisis Round Trip Time (Rtt) Terhadap Kinerja Jaringan Wireless Tcp New Reno.”
- [45] Presiden Republik Indonesia, *Peraturan Pemerintah Republik Indonesia Nomor 21 Tahun 2008 Tentang Penyelenggaraan Penanggulangan Bencana*.
- [46] “Peraturan Menteri Komunikasi dan Informatika Nomor 1 Tahun 2023 tentang Interoperabilitas Data Dalam Penyelenggaraan Sistem Pemerintahan Berbasis Elektronik dan Satu Data Indonesia.”
- [47] Badan Standardisasi Nasional dan R. dan B. Direktorat Standar Nasional Satuan Ukuran Mekanika, *Panduan Kalibrasi Peralatan Volumetrik Menggunakan Metode Gravimetrik*.
- [48] J. Da Loong, R. Abdulla, S. K. Selvaperumal, dan M. E. Rana, “IoT-Based Flood Monitoring System Using Machine Learning Approach,” dalam *2023 4th International Conference on Data Analytics for Business and Industry (ICDABI)*, IEEE, Okt 2023, hlm. 47–53. doi: 10.1109/ICDABI60145.2023.10629349.

- [49] I. R. Widiyari dan R. Efendi, "Utilizing LSTM-GRU for IOT-Based Water Level Prediction Using Multi-Variable Rainfall Time Series Data," *Informatics*, vol. 11, no. 4, hlm. 73, Okt 2024, doi: 10.3390/informatics11040073.
- [50] A. A. M. Faudzi, M. M. Raslan, dan N. E. Alias, "IoT based real-time monitoring system of rainfall and water level for flood prediction using LSTM Network," *IOP Conf Ser Earth Environ Sci*, vol. 1143, no. 1, hlm. 012015, Feb 2023, doi: 10.1088/1755-1315/1143/1/012015.
- [51] Ikhwanudin, I. Harjanto, dan F. Yudaningrum, "Design of Water Pump Station Control in Polder System using IoT and Hybrid Fuzzy Neural Network," *IOP Conf Ser Earth Environ Sci*, vol. 1321, no. 1, hlm. 012014, Apr 2024, doi: 10.1088/1755-1315/1321/1/012014.
- [52] V. Malik *dkk.*, "Enhancing Urban Resilience to Flooding in Hydrogeological Risk Areas Through Big Data Analytics Using Deep Neuro-Fuzzy System," 23 Juli 2024. doi: 10.21203/rs.3.rs-4615497/v1.
- [53] S. Patil, "Flood Detection and Monitoring using IOT," *Int J Res Appl Sci Eng Technol*, vol. 13, no. 6, hlm. 1052–1057, Jun 2025, doi: 10.22214/ijraset.2025.72302.
- [54] L.-C. Chang, M.-T. Yang, J.-Y. Liou, P.-Y. Kow, dan F.-J. Chang, "Intelligent Urban Flood Management Using Real-Time Forecasting, Multi-Objective Optimization, and Adaptive Pump Operation," *Smart Cities*, vol. 8, no. 3, hlm. 91, Mei 2025, doi: 10.3390/smartcities8030091.
- [55] J. R. Louise Neypes, M. Sultana, dan A. R. Jules Miyajima, "Real-time Flood Surveillance and Early Warning System using IoT-AI Fusion for Flood Prediction: Smart Framework to Monitoring Solutions." [Daring]. Tersedia pada: [www.ijmcer.com](http://www.ijmcer.com)
- [56] Khaled Mohamed Abdelmagid dan Mohd Fitri Mohd Yakub, "Integrating IoT Sensors and Machine Learning Algorithms for Early Flash Flood Detection System," *International Journal of Advanced Research in Computational Thinking and Data Science*, vol. 5, no. 1, hlm. 60–71, Mar 2025, doi: 10.37934/ctds.5.1.6071.
- [57] A. A. Luthfee *dkk.*, "Early flood detection and avoidance using IoT and machine learning," 2024, hlm. 020017. doi: 10.1063/5.0230082.
- [58] L. Ambararum Pratita, S. Nurcahyo, H. K. Safitri, P. N. Malang, dan P. Korespondensi, "Sistem Monitoring dan Kontrol Level Air pada Pengelolaan Sumber Daya Air

- Menggunakan Kontrol PID,” *Journal of Mechanical and Electrical Technology*, vol. 3, no. 3, 2024.
- [59] X. Qin, S. Wang, M. Meng, H. Long, H. Zhang, dan H. Shi, “Enhancing urban resilience through machine learning-supported flood risk assessment: integrating flood susceptibility with building function vulnerability,” *npj Urban Sustainability*, vol. 5, no. 1, Des 2025, doi: 10.1038/s42949-025-00208-w.
- [60] A. Septiansyah, S. Hasanah, V. Nita Permatasari, dan A. Yuliatwati, “Sistem Informasi Otomatisasi Pelaporan Data Penjualan Toko Buku Nazwa Yang Masuk Dan Yang Keluar”, doi: 10.37817/ikraith-informatika.v8i1.
- [61] N. Abhyankar, P. Shojaee, dan C. K. Reddy, “LLM-FE: Automated Feature Engineering for Tabular Data with LLMs as Evolutionary Optimizers,” Mei 2025, [Daring]. Tersedia pada: <http://arxiv.org/abs/2503.14434>
- [62] E. Ibrahim *dkk.*, “Overview of data preprocessing for machine learning applications in human microbiome research,” *Front Microbiol*, vol. 14, Okt 2023, doi: 10.3389/fmicb.2023.1250909.
- [63] I. Michael, “Evaluation Metrics and Benchmarking for Predictive Accuracy.” [Daring]. Tersedia pada: <https://www.researchgate.net/publication/392315479>
- [64] Anuj Tyagi, “Optimizing digital experiences with content delivery networks: Architectures, performance strategies, and future trends,” *World Journal of Advanced Research and Reviews*, vol. 7, no. 2, hlm. 401–417, Agu 2022, doi: 10.30574/wjarr.2020.7.2.0230.
- [65] L. Grinsztajn, E. Oyallon, dan G. Varoquaux, “Why do tree-based models still outperform deep learning on tabular data?,” Jul 2022, [Daring]. Tersedia pada: <http://arxiv.org/abs/2207.08815>
- [66] E. Halabaku dan E. Bytyçi, “Overfitting in Machine Learning: A Comparative Analysis of Decision Trees and Random Forests,” *Intelligent Automation & Soft Computing*, vol. 39, no. 6, hlm. 987–1006, 2024, doi: 10.32604/iasc.2024.059429.
- [67] D. Bertsimas dan V. Digalakis, “Improving Stability in Decision Tree Models,” Mei 2023, [Daring]. Tersedia pada: <http://arxiv.org/abs/2305.17299>

- [68] P. Vilash dan Dr. M. A. Hameed, "Improvement Of Extreme Gradient Boosting (XGBoost) Algorithm Using Neural Decision Trees on Miscarriage Dataset," *SSRN Electronic Journal*, 2025, doi: 10.2139/ssrn.5190287.