

DAFTAR PUSTAKA

- Al-Malah, K. 2023. A Convolutional Neural Network (CNN) Architecture and Training. In *Machine and Deep Learning Using MATLAB* (pp. 290–360). Wiley. Tersedia pada: <https://doi.org/10.1002/9781394209118.ch7>
- Amrulloh, I. T. A., Sari, B. N., & Padilah, T. N. 2024. Evaluasi Augmentasi Data pada Deteksi Penyakit Daun Tebu dengan Yolov8. *JATI (Jurnal Mahasiswa Teknik Informatika)*, 8(4), 7547–7552. Tersedia pada: <https://doi.org/10.36040/jati.v8i4.10267>
- Arifin, N. 2024. Klasifikasi Jenis Penyakit Pada Daun Pisang Menggunakan Convolution Neural Network (CNN) Model Arsitektur Googlenet. Tugas Akhir, tidak diterbitkan. Universitas Yudharta.
- Badan Pusat Statistik. 2025, 6 Februari. Produksi Tanaman Buah-buahan dan Sayuran Tahunan Menurut Provinsi dan Jenis Tanaman, 2024. Tersedia pada: <https://Www.Bps.Go.Id/Id/Statistics-Table/3/U0dKc1owczVSalJ5VFdOMWVETnlVRVJ6YlRJMFP6MDkjMw==/Produksi-Buah-Buahan-Menurut-Jenis-Tanaman-Menurut-Provinsi--2023.Html>.
- Bakirarar, B., & Elhan, A. H. 2023. Class Weighting Technique to Deal with Imbalanced Class Problem in Machine Learning: Methodological Research. *Turkiye Klinikleri Journal of Biostatistics*, 15(1), 19–29. Tersedia pada: <https://doi.org/10.5336/biostatic.2022-93961>
- Banerjee, D., Kukreja, V., Hariharan, S., & Sharma, V. 2023. Precision Agriculture: Classifying Banana Leaf Diseases with Hybrid Deep Learning Models. Dalam *2023 IEEE 8th International Conference for Convergence in Technology (I2CT)*, 1–5. Tersedia pada: <https://doi.org/10.1109/I2CT57861.2023.10126431>
- Bhuiyan, M. A. B., Islam, S. M. N., Bukhari, M. A. I., Kader, M. A., Chowdhury, M. Z. H., Alam, M. Z., Abdullah, H. M., & Jenny, F. 2022. First Report of

- Pestalotiopsis microspora Causing Leaf Blight of Banana in Bangladesh. *Plant Disease*, 106(5), 1518. Tersedia pada: <https://doi.org/10.1094/PDIS-05-21-1120-PDN>
- Chen, J., Wu, P., Zhang, X., Xu, R., & Liang, J. 2024. Add-Vit: CNN-Transformer Hybrid Architecture for Small Data Paradigm Processing. *Neural Processing Letters*, 56(3), 198. Tersedia pada: <https://doi.org/10.1007/s11063-024-11643-8>
- Criollo, A., Mendoza, M., Saavedra, E., & Vargas, G. 2020. Design and Evaluation of a Convolutional Neural Network for Banana Leaf Diseases Classification. Dalam *2020 IEEE Engineering International Research Conference (EIRCON)*, 1–4. Tersedia pada: <https://doi.org/10.1109/EIRCON51178.2020.9254072>
- Das, D., Singh, M., Mohanty, S. S., & Chakravarty, S. 2020. Leaf Disease Detection using Support Vector Machine. Dalam *2020 International Conference on Communication and Signal Processing (ICCSP)*, 1036–1040. Tersedia pada: <https://doi.org/10.1109/ICCSP48568.2020.9182128>
- David, H. E., Ramalakshmi, K., Venkatesan, R., & Hemalatha, G. 2021. Tomato Leaf Disease Detection Using Hybrid CNN-RNN Model. Tersedia pada: <https://doi.org/10.3233/APC210108>
- Deng, J. 2024. The Data Preprocessing Technique in Machine Learning. *Science and Technology of Engineering, Chemistry and Environmental Protection*, 1(10). Tersedia pada: <https://doi.org/10.61173/0hfqqz07>
- Dosovitskiy, A., Beyer, L., Kolesnikov, A., Weissenborn, D., Zhai, X., Unterthiner, T., Dehghani, M., Minderer, M., Heigold, G., Gelly, S., Uszkoreit, J., & Hounsby, N. 2021. An Image is Worth 16x16 Words: Transformers for Image Recognition at Scale. *Computer Vision and Pattern Recognition*.

- Google. 2025. Classification: Accuracy, precision, recall. Tersedia pada: <https://Developers.Google.Com/Machine-Learning/Crash-Course/Classification/Accuracy-Precision-Recall>.
- Habsy, B. A., A'yun, S. Q., Widyanika, I., Anwar, R. N., Firdaus, W. R., Tirtasari, N. A., & Ramadhan, R. M. 2024. Manajemen Pengumpulan Data. *Jurnal Mahasiswa Kreatif*, 2(6), 34–46. Tersedia pada: <https://doi.org/10.59581/jmk-widyakarya.v2i6.4232>
- Helmawati, N., & Utami, E. 2024. Utilization of the Convolutional Neural Network Method for Detecting Banana Leaf Disease. *Jurnal RESTI (Rekayasa Sistem Dan Teknologi Informasi)*, 8(6), 799–804. Tersedia pada: <https://doi.org/10.29207/resti.v8i6.6140>
- Henuk, J. B. D., Kadja, D. H., & Mau, Y. S. 2020. Inventory and identification of banana cultivar and diseases caused by bacterial and fungal pathogens in West Timor, East Nusa Tenggara Province, Indonesia. *International Journal of Tropical Drylands*, 4(1). Tersedia pada: <https://doi.org/10.13057/tropdrylands/t040103>
- Jaafar, S. A., Rasam, A. R. A., & Diah, N. M. 2024. Evaluating Convolutional Neural Network Architecture for Historical Topographic Hardcopy Maps Analysis: A Study on Training and Validation Accuracy Variation. *Pertanika Journal of Science and Technology*, 32(6), 2609–2629. Tersedia pada: <https://doi.org/10.47836/pjst.32.6.11>
- Jaskowiak, P. A., Costa, I. G., & Campello, R. J. G. B. 2022. The area under the ROC curve as a measure of clustering quality. *Data Mining and Knowledge Discovery*, 36(3), 1219–1245. Tersedia pada: <https://doi.org/10.1007/s10618-022-00829-0>
- Kalim, H., Chug, A., & Singh, A. P. 2022. Citrus Leaf Disease Detection Using Hybrid CNN-RF Model. Dalam *2022 4th International Conference on Artificial Intelligence and Speech Technology (AIST)*, 1–4. Tersedia pada: <https://doi.org/10.1109/AIST55798.2022.10065093>

- Khandagale, H. P., & Patil, S. 2023. Performance Evaluation of Retrained CNN Models for Grape Leaf Disease Identification. Dalam *2023 Second International Conference on Informatics (ICI)*, 1–6. Tersedia pada: <https://doi.org/10.1109/ICI60088.2023.10421744>
- Lubis, & Alifia, F. 2023. Identifikasi Jenis Penyakit Daun pada Tanaman Pisang Menggunakan Metode Faster Region Convolutional Neural Network (Faster R-CNN) Berbasis Android. Universitas Sumatera Utara.
- Nagesh, R. B., Hongal, S. V., Raghunatha, R., Gurumurthy, S. B., Maheswarappa, H. P., Meti, S., & Bhat, D. S. 2023. Evaluation of different management practices against yellow Sigatoka disease of banana (*Musa spp.*) caused by *Mycosphaerella musicola* Leach. *Environment Conservation Journal*, 24(4), 75–80. Tersedia pada: <https://doi.org/10.36953/ECJ.22942591>
- P., T. P., & B., B. 2024. A Hybrid ViT-CNN Model Premeditated for Rice Leaf Disease Identification. *International Journal of Computational Methods and Experimental Measurements*, 12(1), 35–43. Tersedia pada: <https://doi.org/10.18280/ijcmem.120104>
- Park, J., Oh, Y., Kim, Y., & Jeon, Y.-S. 2024. Vision Transformer-based Semantic Communications With Importance-Aware Quantization. *Signal Processing*.
- Parker, W. S. 2024. Model evaluation. Dalam *The Routledge Handbook of Philosophy of Scientific Modeling* (pp. 208–219). Routledge. Tersedia pada: <https://doi.org/10.4324/9781003205647-19>
- Prashanthi, B., Krishna, A. V. P., & Rao, C. M. 2024. LEViT- Leaf Disease identification and classification using an enhanced Vision transformers(ViT) model. *Multimedia Tools and Applications*. Tersedia pada: <https://doi.org/10.1007/s11042-024-19866-6>
- Pratama, M. D., Gustriansyah, R., & Purnamasari, E. 2024. Klasifikasi Penyakit Daun Pisang menggunakan Convolutional Neural Network (CNN). *Jurnal*

Teknologi Terpadu, 10(1), 1–6. Tersedia pada:
<https://doi.org/10.54914/jtt.v10i1.1167>

Raja, N. B., & Rajendran, P. S. 2022. Comparative Analysis of Banana Leaf Disease Detection and Classification Methods. Dalam *2022 6th International Conference on Computing Methodologies and Communication (ICCMC)*, 1215–1222. Tersedia pada:
<https://doi.org/10.1109/ICCMC53470.2022.9753840>

Rayen, S. J., Shanmugapriya, K., Rajeshwari, R., Diwakaran, S., & Dinesh, M. 2024. The smart analysis of image features using CNN based model. Dalam *2024 15th International Conference on Computing Communication and Networking Technologies (ICCCNT)*, 1–5. Tersedia pada:
<https://doi.org/10.1109/ICCCNT61001.2024.10724546>

Rehman, S. U., Anwer, S., Aftab, J., Hamza, A., & Ahmed, A. 2024. An Optimized Novel Hybrid CNN-Vision Transformer (ViT) Architecture for Brain Tumor Classification. Dalam *2024 3rd International Conference on Emerging Trends in Electrical, Control, and Telecommunication Engineering (ETECTE)*, 1–6. Tersedia pada: <https://doi.org/10.1109/ETECTE63967.2024.10824029>

Zahra, R., Shekarizeh, S., & Sabokrou, M. 2023. Global-Local Processing in Convolutional Neural Networks. *Computer Vision and Pattern Recognition*.

Saini, A. 2024. Efficient Banana Leaf Disease Classification Using Vision Transformer (ViT) Model. Dalam *2024 4th International Conference on Technological Advancements in Computational Sciences (ICTACS)*, 176–180. Tersedia pada: <https://doi.org/10.1109/ICTACS62700.2024.10841002>

Smit, J., Burger, L. E., & Schutte, C. S. L. 2024. CNN Defect Detection Using Image Classification Falls Short in Assembly. Dalam *International Conference on Intelligent and Innovative Computing Applications, 2024*, 127–138. Tersedia pada: <https://doi.org/10.59200/ICONIC.2024.015>

- Srivastav, S., Guleria, K., & Sharma, S. 2024. Leveraging Convolutional Neural Network Model for Banana Leaf Disease Detection. Dalam *2024 5th International Conference for Emerging Technology (INCET)*, 1–5. Tersedia pada: <https://doi.org/10.1109/INCET61516.2024.10593076>
- Sukandar, I. C., Anggraeny, F. T., & Swari, M. H. P. 2024. Pengaruh Optimasi dalam Klasifikasi Tumor Otak dengan Hibrida CNN-ViT. *Jurnal Ilmiah Teknik Informatika*.
- Sunarjo, M. S., Gan, H.-S., & Setiadi, D. R. I. M. 2023. High-Performance Convolutional Neural Network Model to Identify COVID-19 in Medical Images. *Journal of Computing Theories and Applications*, 1(1), 19–30. Tersedia pada: <https://doi.org/10.33633/jcta.v1i1.8936>
- Syihad, I. R., Rizal, M., Sari, Z., & Azhar, Y. 2023. CNN Method to Identify the Banana Plant Diseases based on Banana Leaf Images by Giving Models of ResNet50 and VGG-19. *Jurnal RESTI (Rekayasa Sistem Dan Teknologi Informasi)*, 7(6), 1309–1318. Tersedia pada: <https://doi.org/10.29207/resti.v7i6.5000>
- Tanwar, V., Sharma, B., & Aanand, V. 2023. Implementing a Hybrid CNN-SVM Model for Banana Leaf Disease Classification. Dalam *2023 International Conference on Research Methodologies in Knowledge Management, Artificial Intelligence and Telecommunication Engineering (RMKMATE)*, 1–5. Tersedia pada: <https://doi.org/10.1109/RMKMATE59243.2023.10369215>
- Thakur, P. S., Chaturvedi, S., Khanna, P., Sheorey, T., & Ojha, A. 2023. Vision transformer meets convolutional neural network for plant disease classification. *Ecological Informatics*, 77, 102245. Tersedia pada: <https://doi.org/10.1016/j.ecoinf.2023.102245>
- Tiwari, R. G. 2024. Transforming Agricultural Diagnosis: Vision Transformer-Based Classification of Banana Leaf Diseases for Precision Farming. Dalam *2024 1st International Conference on Innovative Engineering Sciences and*

- Technological Research (ICIESTR)*, 1–6. Tersedia pada: <https://doi.org/10.1109/ICIESTR60916.2024.10798372>
- Vaswani, A., Shazeer, N., Parmar, N., Uszkoreit, J., Jones, L., Gomez, A. N., Kaiser, L., & Polosukhin, I. 2017. Attention Is All You Need. *Computation and Language*.
- Wang, M., Lu, Y., Xu, Q., Xiang, T., Chang, J., & Zhang, H. 2024. A Hybrid Model of CNN+ViT of the Recognition for Spodoptera Frugiperda Larval Instar Stages. *Computer Science*.
- Wang, Q., Li, B., Xiao, T., Zhu, J., Li, C., Wong, D. F., & Chao, L. S. 2019. Learning Deep Transformer Models for Machine Translation. *Computation and Language*.
- Wang, S., Li, P., Wu, Z., Zhang, Z., & Tian, S. 2025. Research on the recognition of welding defects by modified ViT model combined with Canny algorithm. *IET Conference Proceedings*, 2024(9), 281–288. Tersedia pada: <https://doi.org/10.1049/icp.2024.2742>
- Wang, Y., Deng, Y., Zheng, Y., Chattopadhyay, P., & Wang, L. 2025. Vision Transformers for Image Classification: A Comparative Survey. *Technologies*, 13(1), 32. Tersedia pada: <https://doi.org/10.3390/technologies13010032>
- Xu, Y., & Goodacre, R. 2018. On Splitting Training and Validation Set: A Comparative Study of Cross-Validation, Bootstrap and Systematic Sampling for Estimating the Generalization Performance of Supervised Learning. *Journal of Analysis and Testing*, 2(3), 249–262. Tersedia pada: <https://doi.org/10.1007/s41664-018-0068-2>
- Yan, J. 2025. Application of Artificial Intelligence in Medicine. *Applied and Computational Engineering*, 121(1), 215–220. Tersedia pada: <https://doi.org/10.54254/2755-2721/2025.20235>
- Yu, Y., Pengbo, H., Qi, Y., He, P., Ahmed, A., Zhang, X., Zhang, H., Wu, Y., Munir, S., He, Y. 2024. Insight into Antifungal Metabolites from Bacillus

stercoris 92p Against Banana Cordana Leaf Spot Caused by Neocordana musae. *Biomolecules*, 14(12), 1495. Tersedia pada: <https://doi.org/10.3390/biom141201495>

Zafar, A., Saba, N., Arshad, A., Alabrah, A., Riaz, S., Suleman, M., Zafar, S., & Nadeem, M. 2024. Convolutional Neural Networks: A Comprehensive Evaluation and Benchmarking of Pooling Layer Variants. *Symmetry*, 16(11), 1516. Tersedia pada: <https://doi.org/10.3390/sym16111516>

Zhao, X., Zhu, Q., & Wu, J. 2024. AResNet-ViT: A Hybrid CNN-Transformer Network for Benign and Malignant Breast Nodule Classification in Ultrasound Images. *Image and Video Processing*.