

DAFTAR PUSTAKA

- [1] U.S. Department of Agriculture, “Raw Strawberry Nutrients.” Accessed: Oct. 16, 2024. [Online]. Available: <https://fdc.nal.usda.gov/fdc-app.html#/food-details/167762/nutrients>
- [2] “Strawberry Production by Country 2025.” Accessed: Jun. 05, 2025. [Online]. Available: <https://worldpopulationreview.com/country-rankings/strawberry-production-by-country>
- [3] Badan Pusat Statistik Indonesia, “Produksi Tanaman Buah-buahan - Tabel Statistik.” Accessed: Oct. 16, 2024. [Online]. Available: <https://www.bps.go.id/id/statistics-table/2/NjIjMg==/produksi-tanaman-buah-buahan.html>
- [4] U. Afzaal, B. Bhattarai, Y. R. Pandeya, and J. Lee, “An Instance Segmentation Model for Strawberry Diseases Based on Mask R-CNN,” *Sensors* 2021, Vol. 21, Page 6565, vol. 21, no. 19, p. 6565, Sep. 2021, doi: 10.3390/S21196565.
- [5] A. B. Amjoud and M. Amrouch, “Object Detection Using Deep Learning, CNNs and Vision Transformers: A Review,” *IEEE Access*, vol. 11, pp. 35479–35516, 2023, doi: 10.1109/ACCESS.2023.3266093.
- [6] “Convolutional Neural Network: A Complete Guide.” Accessed: Jul. 04, 2025. [Online]. Available: <https://learnopencv.com/understanding-convolutional-neural-networks-cnn/>
- [7] Y. Jadeja and K. Modi, “Cloud computing - Concepts, architecture and challenges,” *2012 International Conference on Computing, Electronics and Electrical Technologies, ICCEET 2012*, pp. 877–880, 2012, doi: 10.1109/ICCEET.2012.6203873.
- [8] K. Lano and S. Yassipour Tehrani, “Mobile Application Architectures,” pp. 99–136, 2023, doi: 10.1007/978-3-031-44143-1_6.
- [9] D. Özdemir and H. Ç. Zaim, “Investigation of Attack Types in Android Operating System,” *Journal of Scientific Reports-A*, no. 046, pp. 34–58, Jun. 2021, Accessed: Jun. 17, 2025. [Online]. Available: <https://dergipark.org.tr/en/pub/jsr-a/issue/63349/857264>

- [10] L. Stocchi, N. Pourazad, N. Michaelidou, A. Tanusondjaja, and P. Harrigan, "Marketing Research on Mobile Apps: Past, Present and Future," Mar. 01, 2022, *Springer*. doi: 10.1007/s11747-021-00815-w.
- [11] Z. Huang and M. Benyoucef, "A Systematic Literature Review of Mobile Application Usability: Addressing the Design Perspective," Aug. 01, 2023, *Springer Science and Business Media Deutschland GmbH*. doi: 10.1007/s10209-022-00903-w.
- [12] D. A Ruspandi and A. Kamilah, "Faktor-Faktor Permintaan Dan Nilai Ekonomi Agrowisata Sweetberry Dengan Pendekatan Travel Cost Method," *CEFARS : Jurnal Agribisnis dan Pengembangan Wilayah*, vol. 6, no. 2, pp. 15–29, Sep. 2023, doi: 10.33558/cefars.v6i2.8261.
- [13] F. L. Riyanti, T. Sjah, and E. Fernandez, "Developing Strategies for Strawberry Agrotourism in Sembalun District, East Lombok, Indonesia," *International Journal of Management and Commerce Innovations*, vol. 13, pp. 54–62, 2025, doi: 10.5281/zenodo.15431281.
- [14] B. Ji *et al.*, "Lightweight Tomato Leaf Intelligent Disease Detection Model Based on Adaptive Kernel Convolution and Feature Fusion," *IEEE Transactions on AgriFood Electronics*, vol. 2, pp. 1–13, Sep. 2024, doi: 10.1109/tafe.2024.3445119.
- [15] M. Zhabilla Gustin, I. Suryani, and N. Tri Lestari, "Pengaruh Penyuluhan Gizi Interpersonal Dengan Media Jus 'Gamaberry' (Buah Naga, Tomat, Dan Strawberry) Terhadap Asupan Kalium Dan Natrium Pada Kondisi Prehipertensi," 2023.
- [16] C. Liu, "Advancing Strawberry Disease Detection in Agriculture: A Transfer Learning Approach with YOLOv5 Algorithm," *International Journal of Advanced Computer Science and Applications*, vol. 15, no. 3, p. 1013, Mar. 2024, doi: 10.14569/IJACSA.2024.01503101.
- [17] L. Alzubaidi *et al.*, "Review of deep learning: concepts, CNN architectures, challenges, applications, future directions," *Journal of Big Data 2021 8:1*, vol. 8, no. 1, pp. 1–74, Mar. 2021, doi: 10.1186/S40537-021-00444-8.
- [18] M. M. Khalid and O. Karan, "Deep Learning for Plant Disease Detection," *International Journal of Mathematics, Statistics, and Computer Science*, vol. 2, pp. 75–84, Nov. 2023, doi: 10.59543/ijmscs.v2i.8343.

- [19] D. A. Pramudhita, F. Azzahra, I. K. Arfat, R. Magdalena, and S. Saidah, "Strawberry Plant Diseases Classification Using CNN Based on MobileNetV3-Large and EfficientNet-B0 Architecture," *Jurnal Ilmiah Teknik Elektro Komputer dan Informatika*, vol. 9, no. 3, pp. 522–534, Jul. 2023, doi: 10.26555/jiteki.v9i3.26341.
- [20] H. T. Nguyen, T. D. Tran, T. T. Nguyen, N. M. Pham, P. H. Nguyen Ly, and H. H. Luong, "Strawberry disease identification with vision transformer-based models," *Multimed Tools Appl*, vol. 83, no. 29, pp. 73101–73126, Sep. 2024, doi: 10.1007/s11042-024-18266-0.
- [21] J. Wang *et al.*, "BerryNet-Lite: A Lightweight Convolutional Neural Network for Strawberry Disease Identification," *Agriculture 2024, Vol. 14, Page 665*, vol. 14, no. 5, p. 665, Apr. 2024, doi: 10.3390/AGRICULTURE14050665.
- [22] S. Chen, Y. Liao, F. Lin, and B. Huang, "An Improved Lightweight YOLOv5 Algorithm for Detecting Strawberry Diseases," *IEEE Access*, vol. 11, no. 2023, pp. 54080–54092, Jun. 2023, doi: 10.1109/ACCESS.2023.3282309.
- [23] Y. He, Y. Peng, C. Wei, Y. Zheng, C. Yang, and T. Zou, "Automatic Disease Detection from Strawberry Leaf Based on Improved YOLOv8," *Plants 2024, Vol. 13, Page 2556*, vol. 13, no. 18, p. 2556, Sep. 2024, doi: 10.3390/PLANTS13182556.
- [24] Ir. Sri Haryati *et al.*, *Budi Daya Stroberi*. Pertanian Press, 2023.
- [25] W. Shafik, A. Tufail, A. Namoun, L. C. De Silva, and R. A. A. H. M. Apong, "A Systematic Literature Review on Plant Disease Detection: Motivations, Classification Techniques, Datasets, Challenges, and Future Trends," *IEEE Access*, vol. 11, pp. 59174–59203, 2023, doi: 10.1109/ACCESS.2023.3284760.
- [26] N. Verde, P. Patias, and G. Mallinis, "A Cloud-Based Mapping Approach Using Deep Learning and Very-High Spatial Resolution Earth Observation Data to Facilitate the SDG 11.7.1 Indicator Computation," *Remote Sens (Basel)*, vol. 14, no. 4, Feb. 2022, doi: 10.3390/rs14041011.
- [27] Y. Özçevik and F. Sönmez, "An embedded TensorFlow lite model for classification of chip images with respect to chip morphology depending on varying feed," *J Intell Manuf*, Mar. 2024, doi: 10.1007/s10845-023-02320-z.

- [28] K. Cao, Y. Liu, G. Meng, and Q. Sun, “An Overview on Edge Computing Research,” 2020, *Institute of Electrical and Electronics Engineers Inc.* doi: 10.1109/ACCESS.2020.2991734.
- [29] E. Mabotha, N. E. Mabunda, and A. Ali, “A Dockerized Approach to Dynamic Endpoint Management for RESTful Application Programming Interfaces in Internet of Things Ecosystems,” *Sensors*, vol. 25, no. 10, p. 2993, May 2025, doi: 10.3390/s25102993.
- [30] K. Petrakis *et al.*, “Enhancing DevOps Practices in the IoT–Edge–Cloud Continuum: Architecture, Integration, and Software Orchestration Demonstrated in the COGNIFOG Framework,” *Software*, vol. 4, no. 2, p. 10, Apr. 2025, doi: 10.3390/software4020010.
- [31] V. Chandrasekhar, N. Sharma, J. Schaub, C. Steinbeck, and K. Rajan, “Cheminformatics Microservice: unifying access to open cheminformatics toolkits,” *J Cheminform*, vol. 15, no. 1, Dec. 2023, doi: 10.1186/s13321-023-00762-4.
- [32] R. Mayer and H. A. Jacobsen, “Scalable Deep Learning on Distributed Infrastructures,” *ACM Computing Surveys (CSUR)*, vol. 53, no. 1, Feb. 2020, doi: 10.1145/3363554.
- [33] M. Xu, J. E. Park, J. Lee, J. Yang, and S. Yoon, “Plant Disease Recognition Datasets in the Age of Deep Learning: Challenges and Opportunities,” Dec. 2023, doi: 10.3389/fpls.2024.1452551.
- [34] “ISO/IEC 25010:2023(en), Systems and software engineering — Systems and software Quality Requirements and Evaluation (SQuaRE) — Product quality model.” Accessed: Jun. 05, 2025. [Online]. Available: <https://www.iso.org/obp/ui/en/#iso:std:iso-iec:25010:ed-2:v1:en>
- [35] Badan Standardisasi Nasional, “Standar Nasional Indonesia (SNI) Nomor 8026 Tahun 2014,” 2014, [Online]. Available: www.bsn.go.id
- [36] Y. Long, I. Chakraborty, G. Srinivasan, and K. Roy, “Complexity-aware adaptive training and inference for edge-cloud distributed ai systems,” *Proc Int Conf Distrib Comput Syst*, vol. 2021-July, pp. 573–583, Jul. 2021, doi: 10.1109/ICDCS51616.2021.00061.

- [37] M. Hassam *et al.*, “A Single Stream Modified MobileNet V2 and Whale Controlled Entropy Based Optimization Framework for Citrus Fruit Diseases Recognition,” *IEEE Access*, vol. 10, pp. 91828–91839, 2022, doi: 10.1109/ACCESS.2022.3201338.
- [38] Z. Lin, H. Ye, B. Zhan, and X. Huang, “An efficient network for surface defect detection,” *Applied Sciences (Switzerland)*, vol. 10, no. 17, Sep. 2020, doi: 10.3390/app10176085.
- [39] B. Zielosko, K. Jabłoński, and A. Dmytrenko, “Exploiting Data Distribution: A Multi-Ranking Approach,” *Entropy*, vol. 27, no. 3, Mar. 2025, doi: 10.3390/e27030278.
- [40] M. Almutairi and F. T. Sheldon, “IoT–Cloud Integration Security: A Survey of Challenges, Solutions, and Directions,” Apr. 01, 2025, *Multidisciplinary Digital Publishing Institute (MDPI)*. doi: 10.3390/electronics14071394.
- [41] M. Waleed, T. Kamal, T. W. Um, A. Hafeez, B. Habib, and K. E. Skouby, “Unlocking Insights in IoT-Based Patient Monitoring: Methods for Encompassing Large-Data Challenges,” *Sensors*, vol. 23, no. 15, Aug. 2023, doi: 10.3390/s23156760.
- [42] C. Kwon and D. Kang, “Overlay-ML: Unioning Memory and Storage Space for On-Device AI on Mobile Devices,” *Applied Sciences (Switzerland)*, vol. 14, no. 7, Apr. 2024, doi: 10.3390/app14073022.
- [43] I. Ficili, M. Giacobbe, G. Tricomi, and A. Puliafito, “From Sensors to Data Intelligence: Leveraging IoT, Cloud, and Edge Computing with AI,” *Sensors*, vol. 25, no. 6, Mar. 2025, doi: 10.3390/s25061763.
- [44] B. Min, T. Kim, D. Shin, and D. Shin, “Data Augmentation Method for Plant Leaf Disease Recognition,” *Applied Sciences (Switzerland)*, vol. 13, no. 3, Feb. 2023, doi: 10.3390/app13031465.
- [45] C. Hu, N. Cao, H. Zhou, and B. Guo, “Medical Image Classification with a Hybrid SSM Model Based on CNN and Transformer,” *Electronics (Switzerland)*, vol. 13, no. 15, Aug. 2024, doi: 10.3390/electronics13153094.
- [46] H. Jia *et al.*, “Efficient and privacy-preserving image classification using homomorphic encryption and chunk-based convolutional neural network,” *Journal of Cloud Computing*, vol. 12, no. 1, Dec. 2023, doi: 10.1186/s13677-023-00537-0.

- [47] A. K. Dubey and K. K. Mohbey, “Combined Cloud-Based Inference System for the Classification of COVID-19 in CT-Scan and X-Ray Images,” *New Gener Comput*, vol. 41, no. 1, pp. 61–84, Mar. 2023, doi: 10.1007/s00354-022-00195-x.
- [48] S. T. Pulla, H. Yasarer, and L. D. Yarbrough, “Transforming Hydrology Python Packages into Web Application Programming Interfaces: A Comprehensive Workflow Using Modern Web Technologies,” *Water (Switzerland)*, vol. 16, no. 18, Sep. 2024, doi: 10.3390/w16182609.
- [49] B. K. Shejwal and S. A. Wadhai, “Microsoft Azure: Cloud Platform for Application Service Deployment,” *IJARCCCE International Journal of Advanced Research in Computer and Communication Engineering Impact Factor 7.39 / □ Vol*, vol. 11, 2022, doi: 10.17148/IJARCCCE.2022.114136.
- [50] V. Manolov, D. Gotseva, and N. Hinov, “Practical Comparison Between the CI/CD Platforms Azure DevOps and GitHub,” *Future Internet*, vol. 17, no. 4, Apr. 2025, doi: 10.3390/fi17040153.
- [51] M. Islam, A. K. M. Azad, S. E. Arman, S. A. Alyami, and M. M. Hasan, “PlantCareNet: an advanced s ystem to recognize plant diseases with dual-mode recommendations for prevention,” *Plant Methods*, vol. 21, no. 1, pp. 1–27, Dec. 2025, doi: 10.1186/S13007-025-01366-9/TABLES/8.
- [52] M. C. Batistatos, T. de Cola, M. A. Kourtis, V. Apostolopoulou, G. K. Xilouris, and N. C. Sagias, “AGRARIAN: A Hybrid AI-Driven Architecture for Smart Agriculture,” *Agriculture 2025, Vol. 15, Page 904*, vol. 15, no. 8, p. 904, Apr. 2025, doi: 10.3390/AGRICULTURE15080904.
- [53] A. T. Khan, S. M. Jensen, A. R. Khan, and S. Li, “Plant disease detection model for edge computing devices,” *Front Plant Sci*, vol. 14, p. 1308528, Dec. 2023, doi: 10.3389/FPLS.2023.1308528/BIBTEX.
- [54] T. Miller, G. Mikiciuk, I. Durlik, M. Mikiciuk, A. Łobodzińska, and M. Śnieg, “The IoT and AI in Agriculture: The Time Is Now—A Systematic Review of Smart Sensing Technologies,” *Sensors 2025, Vol. 25, Page 3583*, vol. 25, no. 12, p. 3583, Jun. 2025, doi: 10.3390/s25123583.

- [55] M. Jung *et al.*, “Construction of deep learning-based disease detection model in plants,” *Sci Rep*, vol. 13, no. 1, pp. 1–13, Dec. 2023, doi: 10.1038/S41598-023-34549-2;SUBJMETA=114,1305,1386,1564,631;KWRD=CLASSIFICATION+AND+TAXONOMY,IMAGE+PROCESSING,MACHINE+LEARNING.
- [56] A. Rathod, D. Panchal, N. Minocha, and D. Bhatt, “Crop Disease Detection Using Lightweight Deep Learning Model for Smartphone,” *IJSAT - International Journal on Science and Technology*, vol. 16, no. 2, Apr. 2025, doi: 10.71097/IJSAT.V16.I2.4410.
- [57] H. Wang, S. Qiu, H. Ye, and X. Liao, “A Plant Disease Classification Algorithm Based on Attention MobileNet V2,” *Algorithms 2023, Vol. 16, Page 442*, vol. 16, no. 9, p. 442, Sep. 2023, doi: 10.3390/A16090442.
- [58] P. T. Huong, L. T. Hien, N. M. Son, H. C. Tuan, and T. Q. Nguyen, “Enhancing deep convolutional neural network models for orange quality classification using MobileNetV2 and data augmentation techniques,” *J Algorithm Comput Technol*, vol. 19, Jan. 2025, doi: 10.1177/17483026241309070/ASSET/DB3872A3-B6C2-4FD3-8117-7803C8D60EBB/ASSETS/IMAGES/LARGE/10.1177_17483026241309070-FIG24.JPG.
- [59] J. Wang, J. Li, and F. Meng, “Recognition of Strawberry Powdery Mildew in Complex Backgrounds: A Comparative Study of Deep Learning Models,” *AgriEngineering 2025, Vol. 7, Page 182*, vol. 7, no. 6, p. 182, Jun. 2025, doi: 10.3390/AGRIENGINEERING7060182.
- [60] S. Lee and S. Lee, “Efficient Data Augmentation Methods for Crop Disease Recognition in Sustainable Environmental Systems,” *Big Data and Cognitive Computing 2025, Vol. 9, Page 8*, vol. 9, no. 1, p. 8, Jan. 2025, doi: 10.3390/BDCC9010008.
- [61] K. Alomar, H. I. Aysel, and X. Cai, “Data Augmentation in Classification and Segmentation: A Survey and New Strategies,” *Journal of Imaging 2023, Vol. 9, Page 46*, vol. 9, no. 2, p. 46, Feb. 2023, doi: 10.3390/JIMAGING9020046.
- [62] X. Li, L. Jiao, K. Liu, Q. Liu, and Z. Wang, “StrawberryNet: Fast and Precise Recognition of Strawberry Disease Based on Channel and Spatial Information

- Reconstruction,” *Agriculture 2025*, Vol. 15, Page 779, vol. 15, no. 7, p. 779, Apr. 2025, doi: 10.3390/AGRICULTURE15070779.
- [63] Y. M. Ayid, Y. Fouad, M. Kaddes, and H. M. El-Hoseny, “An intelligent framework for crop health surveillance and disease management,” *PLoS One*, vol. 20, no. 5, p. e0324347, May 2025, doi: 10.1371/JOURNAL.PONE.0324347.
- [64] I. Zufahmi, S. I. Al Idrus, H. Syahputra, I. Taufik, and K. S. S, “Implementation of MobileNet V3 In Classifying Butterfly Species with Android and Cloud Based Application Development,” *Journal of Artificial Intelligence and Engineering Applications (JAIEA)*, vol. 4, no. 2, pp. 996–1004, Feb. 2025, doi: 10.59934/JAIEA.V4I2.797.
- [65] F. Lăcătușu, A. D. Ionita, M. Lăcătușu, and A. Olteanu, “Performance Evaluation of Information Gathering from Edge Devices in a Complex of Smart Buildings,” *Sensors 2022*, Vol. 22, Page 1002, vol. 22, no. 3, p. 1002, Jan. 2022, doi: 10.3390/S22031002.
- [66] M. H. Akhtar, I. Eksheir, and T. Shanableh, “Edge-Optimized Deep Learning Architectures for Classification of Agricultural Insects with Mobile Deployment,” *Information 2025*, Vol. 16, Page 348, vol. 16, no. 5, p. 348, Apr. 2025, doi: 10.3390/INFO16050348.
- [67] M. Flaschel, P. Steinmann, L. De Lorenzis, and E. Kuhl, “Convex neural networks learn generalized standard material models,” *J Mech Phys Solids*, vol. 200, p. 106103, Jul. 2025, doi: 10.1016/J.JMPS.2025.106103.
- [68] X. Zhou *et al.*, “Vision Language Models in Autonomous Driving: A Survey and Outlook,” *IEEE Transactions on Intelligent Vehicles*, Jun. 2024, doi: 10.1109/TIV.2024.3402136.
- [69] M. Milosz, M. Plechawska-Wójcik, and M. Dzié, “Testing the Quality of the Mobile Application Interface Using Various Methods—A Case Study of the T1DCoach Application,” *Applied Sciences 2024*, Vol. 14, Page 6583, vol. 14, no. 15, p. 6583, Jul. 2024, doi: 10.3390/APP14156583.
- [70] S. A. Nagro, “User Experiences and Usability Evaluation of COVID-19 Application,” *Journal of Computer Science*, vol. 19, no. 3, pp. 372–388, Feb. 2023, doi: 10.3844/JCSSP.2023.372.388.