

DAFTAR PUSTAKA

- Ahmed, N. A. (2024, November 10). *What is A Confusion Matrix in Machine Learning? The Model Evaluation Tool Explained*. Retrieved from DataCamp: https://www.datacamp.com/tutorial/what-is-a-confusion-matrix-in-machine-learning?utm_source=google&utm_medium=paid_search&utm_campaignid=19589720824&utm_adgroupid=157156376071&utm_device=c&utm_keyword=&utm_matchtype=&utm_network=g&utm_adpostion=&utm_creat
- Alif, M. A. R. (2024). *YOLOv11 for Vehicle Detection: Advancements, Performance, and Applications in Intelligent Transportation Systems*. *arXiv preprint arXiv:2410.22898*.
- Alzubaidi, L., Zhang, J., Humaidi, A. J., Al-Dujaili, A., Duan, Y., Al-Shamma, O., ... & Farhan, L. (2021). Review of deep learning: concepts, CNN architectures, challenges, applications, future directions. *Journal of big Data*, 8, 1-74.
- Bichri, H., Chergui, A., & Hain, M. (2024). Investigating the Impact of Train/Test Split Ratio on the Performance of Pre-Trained Models with Custom Datasets. *International Journal of Advanced Computer Science & Applications*, 15(2).
- Budiarti, L., & Nurcahyo, G. W. (2024). Penerapan Metode Jaringan Syaraf Tiruan Backpropagation Untuk Memprediksi Kualitas Makanan Kucing. *Jurnal KomtekInfo*, 390-397.
- Carranza-García, M., Torres-Mateo, J., Lara-Benítez, P., & García-Gutiérrez, J. (2020). On the performance of one-stage and two-stage object detectors in autonomous vehicles using camera data. *Remote Sensing*, 13(1), 89.
- Cevallos, J. C., Villagomez, J. A., & Andryshchenko, I. S. (2019). *Convolutional Neural Network* in the recognition of spatial *images* of sugarcane crops in the Troncal region of the coast of Ecuador. *Procedia Computer Science*, 150, 757-763.
- Chaganti, S. Y., Nanda, I., Pandi, K. R., Prudhvith, T. G., & Kumar, N. (2020, March). Image Classification using SVM and CNN. In *2020 International conference on computer science, engineering and applications (ICCSEA)* (pp. 1-5). IEEE.
- Chen, W., Ju, C., Li, Y., Hu, S., & Qiao, X. (2021). Sugarcane stem node recognition in field by *deep learning* combining data expansion. *Applied Sciences*, 11(18), 8663.
- Dåderman, A., & Rosander, S. (2018). Evaluating *frameworks* for implementing *machine learning* in signal processing: A comparative study of CRISP-DM, SEMMA and KDD.

- Daphal, S. D., & Koli, S. M. (2024). Enhanced deep learning technique for sugarcane leaf disease classification and mobile application integration. *Heliyon*, 10(8).
- Hasan, N. F. (2023). Deteksi dan Klasifikasi Penyakit Pada Daun Kopi Menggunakan Yolov7. *Jurnal Sisfokom (Sistem Informasi Dan Komputer)*, 12(1), 30-35.
- He, Z., Wang, K., Fang, T., Su, L., Chen, R., & Fei, X. (2024). Comprehensive Performance Evaluation of YOLOv11, YOLOv10, YOLOv9, YOLOv8 and YOLOv5 on Object Detection of Power Equipment. *arXiv preprint arXiv:2411.18871*.
- Hidayah, A. N., Radzi, S. A., Razak, N. A., Saad, W. H. M., Wong, Y. C., & Naja, A. A. (2022). Disease Detection of Solanaceous Crops Using Deep learning for Robot Vision. *Journal of Robotics and Control (JRC)*, 3(6), 790-799.
- Jain, A. (2023, March 14). *Crash Course in Data: Preprocessing of Image Data*. Retrieved from medium.com: <https://medium.com/aiskunks/crash-course-in-data-preprocessing-of-image-data-af467cc093ed>
- Jefkine. (2016, September 5). *Backpropagation In Convolutional Neural Networks*. Retrieved from DeepGrid:
- Joseph, V. R. (2022). Optimal ratio for data splitting. *Statistical Analysis and Data Mining: The ASA Data Science Journal*, 15(4), 531-538.
- Kalirane, M. (2025, May 14). *Gradient Descent vs. Backpropagation: What's the Difference?* Retrieved from Analytics Vidhya: <https://www.analyticsvidhya.com/blog/2023/01/gradient-descent-vs-backpropagation-whats-the-difference/>
- Khan, A. A., Laghari, A. A., & Awan, S. A. (2021). Machine learning in computer vision: A review. *EAI Endorsed Transactions on Scalable Information Systems*, 8(32).
- Khanam, R., & Hussain, M. (2024). YOLOv11: An overview of the key architectural enhancements. *arXiv preprint arXiv:2410.17725*.
- Kisantal, M. (2019). Augmentation for Small Object Detection. *arXiv preprint arXiv:1902.07296*.
- Kunduracioğlu, İ., & Paçal, İ. (2024). Deep learning-Based Disease Detection in Sugarcane Leaves: Evaluating EfficientNet Models. *Journal of Operations Intelligence*, 2(1), 321-235.
- Kurniawan, A., & Wonohadidjojo, D. M. (2023). Sistem Deteksi dan Klasifikasi Truk Air Menggunakan YOLO v5 dan EfficientNet-B4. *INSYST: Journal of Intelligent System and Computation*, 5(2), 115-122.

- Kusmin, N. Z. (2023). *Analisis Pengendalian Mutu Bahan Baku Tebu untuk Mencapai Rendemen Gula Optimal di PG Krebet Baru I*. Universitas Brawijaya.
<https://repository.ub.ac.id/id/eprint/173545/1/Nur%20Zakiah%20Kusmin.pdf>
- Li, X., Li, X., Han, B., Wang, S., & Chen, K. (2023). Application of *EfficientNet* and YOLOv5 model in submarine pipeline inspection and a new decision-making system. *Water*, 15(19), 3386.
- Magfiroh, I. S., Intan, K. S., & Rudi, W. (2021). Mutu tebu industri gula di Indonesia. In *Prosiding Seminar Nasional Sosial Ekonomi Fakultas Pertanian*.
- Manurung, D. G., Pinasthika, M. R., Vasya, M. A. O., Putri, R. A. D. S., Tampubolon, A. P., Prayata, R. F., ... & Yudistira, N. (2024). Deteksi Dan Klasifikasi Hama Potato Beetle Pada Tanaman Kentang Menggunakan YOLOV8. *Jurnal Teknologi Informasi dan Ilmu Komputer*, 11(4), 723-734.
- Marzuki, M. B. (2025, April 25). *32 Pabrik Gula di Jatim Sumbang Separuh Lebih Kebutuhan Gula Nasional*. Retrieved from [jatimtimes.com: https://jatimtimes.com/baca/336030/20250425/024200/32-pabrik-gula-di-jatim-sumbang-separuh-lebih-kebutuhan-gula-nasional](https://jatimtimes.com/baca/336030/20250425/024200/32-pabrik-gula-di-jatim-sumbang-separuh-lebih-kebutuhan-gula-nasional).
- Mohammed, A., & Kora, R. (2023). A comprehensive review on ensemble *deep learning*: Opportunities and challenges. *Journal of King Saud University-Computer and Information Sciences*, 35(2), 757-774.
- Mosbach, M., Andriushchenko, M., & Klakow, D. (2020). On the stability of fine-tuning bert: Misconceptions, explanations, and strong baselines. *arXiv preprint arXiv:2006.04884*.
- Paliwang, A. A. A., Septian, M. R. D., Cahyanti, M., & Swedia, E. R. (2020). Klasifikasi Penyakit Tanaman Apel Dari Citra Daun Dengan Convolutional Neural Network. *Sebatik*, 24(2), 207-212.
- Pratitis, W. L., Kurniasari, K., & Al Fata, H. (2023). Classification of Spotted Disease on Sugarcane Leaf Image Using *Convolutional Neural Network* Algorithm. *Jurnal Sistem Telekomunikasi Elektronika Sistem Kontrol Power Sistem dan Komputer*, 3(2), 117-128.
- Prakash, D. A.(2024). A Comparative Analysis of Object Identification Labelling Platforms: Basketball Perspective. *Int J Med Net*, 2(3), 01-04.
- Purwono, P., Ma'arif, A., Rahmaniar, W., Fathurrahman, H. I. K., Frisky, A. Z. K., & ul Haq, Q. M. (2022). Understanding of convolutional neural network (cnn): A review. *International Journal of Robotics and Control Systems*, 2(4), 739-748.

- Rahmadini, W. (2024). Proses Produksi Gula Dan Analisis Performasi Turbin Uap Kapasitas 3, 6 MW di Pabrik Gula Jatiroto.
- Redmon, J., Divvala, S., Girshick, R., & Farhadi, A. (2016). You only look once: Unified, real-time object detection. In *Proceedings of the IEEE conference on computer vision and pattern recognition* (pp. 779-788).
- Schröer, C., Kruse, F., & Gómez, J. M. (2021). A systematic literature review on applying CRISP-DM process model. *Procedia Computer Science*, 181, 526-534.
- Shorten, C., & Khoshgoftaar, T. M. (2019). A survey on image data augmentation for deep learning. *Journal of big data*, 6(1), 1-48.
- Showrav, T. T., Bain, S., Hossain, M., Ahmed, K. I., Fattah, S. A., & Ahmed, S. (2022, December). A two-stage approach for plant disease classification based on deep neural networks and transfer learning. In *2022 12th International Conference on Electrical and Computer Engineering (ICECE)* (pp. 469-472). IEEE.
- Sivakoti, K. (2024). Vehicle Detection and Classification for Toll collection using *YOLOv11* and Ensemble OCR. *arXiv preprint arXiv:2412.12191*.
- Solichah, Z. (2024, August 22). *PG Djatiroto tingkatkan sinergi untuk wujudkan swasembada gula*. Retrieved from [www.antaranews.com: https://www.antaranews.com/berita/4280367/pg-djatiroto-tingkatkan-sinergi-untuk-wujudkan-swasembada-gula](https://www.antaranews.com/berita/4280367/pg-djatiroto-tingkatkan-sinergi-untuk-wujudkan-swasembada-gula)
- Srinivasan, S., Prabin, S. M., Mathivanan, S. K., Rajadurai, H., Kulandaivelu, S., & Shah, M. A. (2025). Sugarcane leaf disease classification using deep neural network approach. *BMC Plant Biology*, 25(1), 282.
- Suwitono, Y. A., & Kaunang, F. J. (2022). Implementasi Algoritma Convolutional Neural Network (CNN) Untuk Klasifikasi Daun Dengan Metode Data Mining SEMMA Menggunakan Keras. *Jurnal Komtika (Komputasi dan Informatika)*, 6(2), 10
- Tan, M., & Le, Q. (2019, May). *EfficientNet: Rethinking model scaling for convolutional neural networks*. In *International conference on machine learning* (pp. 6105-6114). PMLR.
- Tan, M., & Le, Q. (2021, July). *EfficientNetv2: Smaller models and faster training*. In *International conference on machine learning* (pp. 10096-10106). PMLR.
- Upadhye, S. A., Dhanvijay, M. R., & Patil, S. M. (2023). Sugarcane disease detection Using CNN-deep learning method: An Indian perspective. *Universal Journal of Agricultural Research*, 11(1), 80-97.
- Wang, C. Y., Bochkovskiy, A., & Liao, H. Y. M. (2023). YOLOv7: Trainable bag-of-freebies sets new state-of-the-art for real-time object detectors.

In *Proceedings of the IEEE/CVF conference on computer vision and pattern recognition* (pp. 7464-7475).

- Wang, P., Fan, E., & Wang, P. (2021). Comparative analysis of image classification algorithms based on traditional machine learning and deep learning. *Pattern recognition letters*, 141, 61-67.
- Wu, X., Sahoo, D., & Hoi, S. C. (2020). Recent advances in *deep learning* for object detection. *Neurocomputing*, 396, 39-64.
- Wu, Z. (2024). Application of CNN Classic Model in Modern Image Processing. *Journal of Advances in Engineering and Technology*, 1(3), 1-6.
- Yang, Z., Sinnott, R. O., Bailey, J., & Ke, Q. (2023). A survey of automated data augmentation algorithms for deep learning-based image classification tasks. *Knowledge and Information Systems*, 65(7), 2805-2861.
- Yao, C., Yang, Z., Li, P., Liang, Y., Fan, Y., Luo, J., ... & Mu, J. (2024). Two-Stage Detection Algorithm for Plum Leaf Disease and Severity Assessment Based on Deep Learning. *Agronomy*, 14(7), 1589.
- Yepes, J., Oré, G., Alcántara, M. S., Hernandez-Figueroa, H. E., & Teruel, B. (2022). Classification of sugarcane yields according to soil fertility properties using supervised machine learning methods. *Engenharia Agrícola*, 42(5), e2021023
- Zhang, C., Bengio, S., Hardt, M., Recht, B., & Vinyals, O. (2016). Understanding deep learning requires rethinking generalization. *arXiv preprint arXiv:1611.03530*.