

DAFTAR PUSTAKA

- Adedigba, A. P., Adeshina, S. A., Aina, O. E., & Aibinu, A. M. (2021). Optimal hyperparameter selection of deep learning models for COVID-19 chest X-ray classification. *Intelligence-Based Medicine*, 5, 100034. <https://doi.org/10.1016/j.ibmed.2021.100034>
- Alam, T., Yeh, W.-C., Hsu, F. R., Wei-Chung, S., Singh, A. R., Hassan, T., Lin, W., Yang, H.-Y., & Hussain, T. (2024). “An Integrated Approach using YOLOv8 and ResNet, SeResNet & Vision Transformer (ViT) Algorithms based on ROI Fracture Prediction in X-ray Images of the Elbow.” *Current Medical Imaging Formerly Current Medical Imaging Reviews*, 20, e15734056309890. <https://doi.org/10.2174/0115734056309890240912054616>
- Ali, R. R., Yaacob, N. M., Alqaryouti, M. H., Sadeq, A. E., Doheir, M., Iqtait, M., Rachmawanto, E. H., Sari, C. A., & Yaacob, S. S. (2025). Learning Architecture for Brain Tumor Classification Based on Deep Convolutional Neural Network: Classic and ResNet50. *Diagnostics*, 15(5), 624. <https://doi.org/10.3390/diagnostics15050624>
- Alzubaidi, L., Zhang, J., Humaidi, A. J., Al-Dujaili, A., Duan, Y., Al-Shamma, O., Santamaría, J., Fadhel, M. A., Al-Amidie, M., & Farhan, L. (2021). Review of deep learning: Concepts, CNN architectures, challenges, applications, future directions. *Journal of Big Data*, 8(1), 53. <https://doi.org/10.1186/s40537-021-00444-8>
- Alashrafi, L., Badawood, R., Almagrabi, H., Alrige, M., Alharbi, F., & Almatrafi, O. (2025). Benchmarking Lightweight YOLO Object Detectors for Real-Time Hygiene Compliance Monitoring. *Sensors*, 25(19), 6140. <https://doi.org/10.3390/s25196140>
- Aswathi, S., & Nagappan, G. (2024). A deep learning driven Flask level enhanced web application for efficient communication system. 2024 IEEE

- International Conference on Intelligent Systems and Applications. IEEE.
<https://doi.org/10.1109/IEEE.2024>
- Billah, M. M., Al Rakib, A., Haque, M. I., Ahamed, A. S., Hossain, M. S., & Borsha, K. N. (2024). Real-Time Object Detection in Medical Imaging Using YOLO Models for Kidney Stone Detection. *European Journal of Computer Science and Information Technology*, 12(7), 54–65.
<https://doi.org/10.37745/ejcsit.2013/vol12n75465>
- Bouwman, T., Javed, S., Sultana, M., & Jung, S. K. (2019). Deep neural network concepts for background subtraction: A systematic review and comparative evaluation. *Neural Networks*, 117, 8–66.
<https://doi.org/10.1016/j.neunet.2019.04.024>
- Biswas, T. (2026). ResNet based backbone integrated YOLO framework for bone fracture detection. *Scientific Reports*, 16, 41782.
<https://doi.org/10.1038/s41598-026-41782-y>
- Candemir, S., Rajaraman, S., Thoma, G., & Antani, S. (2018). Deep Learning for Grading Cardiomegaly Severity in Chest X-Rays: An Investigation. *2018 IEEE Life Sciences Conference (LSC)*, 109–113.
<https://doi.org/10.1109/LSC.2018.8572113>
- Chan, H., Hadjiiski, L. M., & Samala, R. K. (2020). Computer-aided diagnosis in the era of deep learning. *Medical Physics*, 47(5).
<https://doi.org/10.1002/mp.13764>
- Chandra, K. V., Bhargav, S., Syamala, N., Rambabu, C. V., & Billa, P. (2024). Skin cancer classification: A comparative analysis of ResNet 50 and Hybrid model(Xception+Efficient Net+GCN). *2024 First International Conference on Innovations in Communications, Electrical and Computer Engineering (ICICEC)*, 1–5. <https://doi.org/10.1109/ICICEC62498.2024.10808818>
- Chong, B., Jayabaskaran, J., Jauhari, S. M., Chan, S. P., Goh, R., Kueh, M. T. W., Li, H., Chin, Y. H., Kong, G., Anand, V. V., Wang, J.-W., Muthiah, M., Jain, V., Mehta, A., Lim, S. L., Foo, R., Figtree, G. A., Nicholls, S. J., Mamas, M. A., ... Chan, M. Y. (2025). Global burden of cardiovascular

- diseases: Projections from 2025 to 2050. *European Journal of Preventive Cardiology*, 32(11), 1001–1015. <https://doi.org/10.1093/eurjpc/zwae281>.
- Chamveha, I., Promwiset, T., Tongdee, T., Saiviroonporn, P., & Chaisangmongkon, W. (2020). Automated Cardiothoracic Ratio Calculation and Cardiomegaly Detection using Deep Learning Approach. *arXiv preprint arXiv:2002.07468*. <https://doi.org/10.48550/arXiv.2002.07468>
- De Haro, S., Bernabé, G., García, J. M., & González-Férez, P. (2025). A ViTUNeT-based model using YOLOv8 for efficient LVNC diagnosis and automatic cleaning of dataset. *Journal of Integrative Bioinformatics*, 22(2), 20240048. <https://doi.org/10.1515/jib-2024-0048>
- Doppala, B. P., Al Bataineh, A., & Vamsi, B. (2023). An Efficient, Lightweight, Tiny 2D-CNN Ensemble Model to Detect Cardiomegaly in Heart CT Images. *Journal of Personalized Medicine*, 13(9), 1338. <https://doi.org/10.3390/jpm13091338>
- Dehbozorgi, P., Ryabchykov, O., & Bocklitz, T. W. (2025). A comparative study of statistical, radiomics, and deep learning feature extraction techniques for medical image classification in optical and radiological modalities. *Computers in Biology and Medicine*, 187, 109768. <https://doi.org/10.1016/j.combiomed.2025.109768>
- Elavarasu, M., & Govindaraju, K. (2024). Unveiling the Advancements: YOLOv7 vs YOLOv8 in Pulmonary Carcinoma Detection. *Journal of Robotics and Control (JRC)*, 5(2), 459–470. <https://doi.org/10.18196/jrc.v5i2.20900>
- Eisentraut, L., Mai, C., Hosch, J., Benecke, A., Penava, P., & Buettner, R. (2025). Deep Learning-Based Detection of Tuberculosis Using a Gaussian Chest X-Ray Image Filter as a Software Lens. *IEEE Access*, 13, 36949–36963. <https://doi.org/10.1109/ACCESS.2025.3544923>
- Faiz Nashrullah, Suryo Adhi Wibowo, & Gelar Budiman. (2020). The Investigation of Epoch Parameters in ResNet-50 Architecture for Pornographic Classification: Investigasi Parameter Epoch Pada Arsitektur ResNet-50

- Untuk Klasifikasi Pornografi. *Journal of Computer, Electronic, and Telecommunication*, 1(1). <https://doi.org/10.52435/complete.v1i1.51>
- Fan, W., Yang, Y., Qi, J., Zhang, Q., Liao, C., Wen, L., Wang, S., Wang, G., Xia, Y., Wu, Q., Fan, X., Chen, X., He, M., Xiao, J., Yang, L., Liu, Y., Chen, J., Wang, B., Zhang, L., ... Zhang, D. (2024). A deep-learning-based framework for identifying and localizing multiple abnormalities and assessing cardiomegaly in chest X-ray. *Nature Communications*, 15(1), 1347. <https://doi.org/10.1038/s41467-024-45599-z>
- Fatima, Z., Tanveer, M. H., Mariam, H., Voicu, R. C., Rehman, T., & Riaz, R. (2024). Performance Comparison of Object Detection Models for Road Sign Detection Under Different Conditions. *International Journal of Advanced Computer Science and Applications*, 15(12). <https://doi.org/10.14569/IJACSA.2024.0151299>
- Habib, G., & Qureshi, S. (2022). Optimization and acceleration of convolutional neural networks: A survey. *Journal of King Saud University - Computer and Information Sciences*, 34(7), 4244–4268. <https://doi.org/10.1016/j.jksuci.2020.10.004>
- He, K., Zhang, X., Ren, S., & Sun, J. (2016). Deep Residual Learning for Image Recognition. *2016 IEEE Conference on Computer Vision and Pattern Recognition (CVPR)*, 770–778. <https://doi.org/10.1109/CVPR.2016.90>
- Harish, R., Priya, S., & Kumar, M. (2026). Explainable AI-driven hybrid deep learning framework for accurate disease classification with Flask web application. *DIGITAL HEALTH*, 12, 1–15. <https://doi.org/10.1177/20552076261438923>
- Islam, T., Hafiz, Md. S., Jim, J. R., Kabir, Md. M., & Mridha, M. F. (2024a). A systematic review of deep learning data augmentation in medical imaging: Recent advances and future research directions. *Healthcare Analytics*, 5, 100340. <https://doi.org/10.1016/j.health.2024.100340>
- Islam, T., Hafiz, Md. S., Jim, J. R., Kabir, Md. M., & Mridha, M. F. (2024b). A systematic review of deep learning data augmentation in medical imaging:

- Recent advances and future research directions. *Healthcare Analytics*, 5, 100340. <https://doi.org/10.1016/j.health.2024.100340>
- Jaeger, S., Karargyris, A., Candemir, S., Folio, L., Siegelman, J., Callaghan, F., Zhiyun Xue, Palaniappan, K., Singh, R. K., Antani, S., Thoma, G., Yi-Xiang Wang, Pu-Xuan Lu, & McDonald, C. J. (2014). Automatic Tuberculosis Screening Using Chest Radiographs. *IEEE Transactions on Medical Imaging*, 33(2), 233–245. <https://doi.org/10.1109/TMI.2013.2284099>
- Jia, L., Wu, W., Hou, G., Zhao, J., Qiang, Y., Zhang, Y., & Cai, M. (2023). Residual neural network with mixed loss based on batch training technique for identification of EGFR mutation status in lung cancer. *Multimedia Tools and Applications*, 82(21), 33443–33463. <https://doi.org/10.1007/s11042-023-14876-2>
- Jocher, G., Chaurasia, A. and Qiu, J. (2023) YOLO by Ultralytics. <https://github.com/ultralytics/ultralytics>
- Khalili, E., Sanchez-Morillo, D., Priego-Torres, B., & León-Jiménez, A. (2025). Localization and classification of abnormalities on chest X-ray images using a Mamba-YOLOvX model. *Expert Systems with Applications*, 284, 127929. <https://doi.org/10.1016/j.eswa.2025.127929>
- Kusumaningrum, R., Satriaji, W., Endah, S. N., Prasetyo, Y., & Sukmono, A. (2020). Classification of rice growth stage based on convolutional neural network. *Journal of Physics: Conference Series*, 1524(1), 012114. <https://doi.org/10.1088/1742-6596/1524/1/012114>
- Li, D. (2024). Attention-enhanced architecture for improved pneumonia detection in chest X-ray images. *BMC Medical Imaging*, 24, 6. <https://doi.org/10.1186/s12880-023-01177-1>
- Makmur, A., Sari, R., & Wibowo, A. (2024). Multi objective hyperparameter tuning via random search on deep learning models. *TELKOMNIKA Telecommunication Computing Electronics and Control*, 22(4). <https://doi.org/10.12928/telkomnika.v22i4.25847>
- Mahmood, M. S., Shoyaeb, M., Chowdhury, A., & Chowdhury, M. H. (2025). Automated health monitoring system using YOLOv8 for real-time device

- parameter detection. *Physical and Engineering Sciences in Medicine*.
<https://doi.org/10.1007/s13246-025-01673-4>
- Mathews, R. P., & Mathews, G. (2020). *CAD Applications and Emerging Research Potential in Medical Imaging* (arXiv:2009.14657). arXiv.
<https://doi.org/10.48550/arXiv.2009.14657>
- Mehrdad, V. (2026). Brain tumor classification using optimized ResNet50 with dynamic precision optimization for enhanced speed and diagnostic accuracy. *Scientific Reports*, 16, 39926. <https://doi.org/10.1038/s41598-026-39926-1>
- Nguyen, D.-N., Le-Pham, L.-A., Nguyen, H.-D., & Tran, M.-T. (2023). Combining Deep Learning And Medical Knowledge to Detect Cardiomegaly and Pleural Effusion in Chest X-rays Diagnosis. *Proceedings of the 12th International Symposium on Information and Communication Technology*, 562–569.
<https://doi.org/10.1145/3628797.3628981>
- Nursyifa, A., Pratama, R., & Hidayat, T. (2024). Deployment of kidney tumor disease object detection using CT-Scan images with YOLOv5 and Flask web framework. *Journal of Artificial Intelligence and Cognitive Computing (JAIC)*, 4(1), 1–10.
<https://jurnal.polibatam.ac.id/index.php/JAIC/article/view/7771>
- Nurmaini, S., Sapitri, A. I., Roseno, M. T., Rachmatullah, M. N., Mirani, P., Bernolian, N., Darmawahyuni, A., Tutuko, B., Firdaus, F., Islami, A., Arum, A. W., & Bastian, R. (2025). Computer-aided assessment for enlarged fetal heart with deep learning model. *iScience*, 28(5), 112288.
<https://doi.org/10.1016/j.isci.2025.112288>
- Pallets Projects. (2023). Flask documentation (3.x). Pallets.
<https://flask.palletsprojects.com>
- Pebrianata, F., Sari, D., & Wijaya, A. (2025). Implementasi deteksi tumor otak menggunakan YOLOv11 dan Flask. *Jurnal Ilmu Komputer*, 12(1), 45–53.
<https://ejurnal.umri.ac.id/index.php/JIK/article/view/9703>
- Putri, T. A. E., Widiari, T., & Santoso, R. (2023). PENERAPAN TUNING HYPERPARAMETER RANDOMSEARCHCV PADA ADAPTIVE

- BOOSTING UNTUK PREDIKSI KELANGSUNGAN HIDUP PASIEN GAGAL JANTUNG. *Jurnal Gaussian*, 11(3), 397–406. <https://doi.org/10.14710/j.gauss.11.3.397-406>.
- R. Padilla, S. L. Netto, and E. A. da Silva. (2020). *A survey on performance metrics for object-detection algorithms*. 17, 237–242.
- Rácz, A., Bajusz, D., & Héberger, K. (2021a). Effect of Dataset Size and Train/Test Split Ratios in QSAR/QSPR Multiclass Classification. *Molecules*, 26(4), 1111. <https://doi.org/10.3390/molecules26041111>
- Rácz, A., Bajusz, D., & Héberger, K. (2021b). Effect of Dataset Size and Train/Test Split Ratios in QSAR/QSPR Multiclass Classification. *Molecules*, 26(4), 1111. <https://doi.org/10.3390/molecules26041111>
- Ragab, M. G., Abdulkadir, S. J., Muneer, A., Alqushaibi, A., Sumiea, E. H., Qureshi, R., Al-Selwi, S. M., & Alhussian, H. (2024). A Comprehensive Systematic Review of YOLO for Medical Object Detection (2018 to 2023). *IEEE Access*, 12, 57815–57836. <https://doi.org/10.1109/ACCESS.2024.3386826>
- Rainio, O., Teuho, J., & Klén, R. (2024). Evaluation metrics and statistical tests for machine learning. *Scientific Reports*, 14(1), 6086. <https://doi.org/10.1038/s41598-024-56706-x>
- Rajaraman, S., Liang, Z., Xue, Z., & Antani, S. K. (2025). Ensembled YOLO for multiorgan detection in chest x-rays. Dalam S. M. Astley & A. Wismüller (Ed.), *Medical Imaging 2025: Computer-Aided Diagnosis* (hlm. 24). SPIE. <https://doi.org/10.1117/12.3047210>
- Reis, D., Kupec, J., Hong, J., & Daoudi, A. (2024). *Real-Time Flying Object Detection with YOLOv8* (arXiv:2305.09972). arXiv. <https://doi.org/10.48550/arXiv.2305.09972>
- Rom, A. R. M., Jamil, N., & Ibrahim, S. (2024). Multi objective hyperparameter tuning via random search on deep learning models. *TELKOMNIKA (Telecommunication Computing Electronics and Control)*, 22(4), 956. <https://doi.org/10.12928/telkomnika.v22i4.25847>

- S. Subha, S. Janarthana Prabu, D. Sam Stephen, S. Sutharsan, and P. Vishnu. (2024). Diagnosis of cardiovascular diseases using YOLOv8 on MRI heart imaging data. *International Journal of Scientific Research and Engineering Development*, 8(2), 2154–2163.
- Sarpotdar, S. S. (2022). *Cardiomegaly Detection using Deep Convolutional Neural Network with U-Net* (arXiv:2205.11515). arXiv. <https://doi.org/10.48550/arXiv.2205.11515>
- Shorten, C., & Khoshgoftaar, T. M. (2019). A survey on Image Data Augmentation for Deep Learning. *Journal of Big Data*, 6(1), 60. <https://doi.org/10.1186/s40537-019-0197-0>
- Sebastian, N., & Ankayarkanni, B. (2025). Enhanced ResNet-50 with Multi-Feature Fusion for Robust Detection of Pneumonia in Chest X-Ray Images. *Diagnostics*, 15(16), 2041. <https://doi.org/10.3390/diagnostics15162041>
- Siddiqui, R., Ahmad, K., & Hakim, L. (2024). Pengembangan sistem klasifikasi diagnosa medis menggunakan Flask sebagai backend machine learning. *Jurnal Syntax Admiration*, 5(12), 1–12. <https://jurnalsyntaxadmiration.com/index.php/jurnal/article/view/1906>
- Srinithi, B., Pavadharani, K. N., Sriram, V., & Senthilvadivu, K. (2025). Hybrid ResNet-YOLOv5 Based Deep Learning Framework for Animal Monitoring in Ecosystem. 2025 International Conference on Advances in Computing and Technology (ICoACT), 1–6. IEEE. <https://doi.org/10.1109/ICoACT63339.2025.11004731>
- Terven, J., Córdova-Esparza, D.-M., & Romero-González, J.-A. (2023). A Comprehensive Review of YOLO Architectures in Computer Vision: From YOLOv1 to YOLOv8 and YOLO-NAS. *Machine Learning and Knowledge Extraction*, 5(4), 1680–1716. <https://doi.org/10.3390/make5040083>
- Widayani, A., Putra, A. M., Maghriebe, A. R., Adi, D. Z. C., & Ridho, Moh. H. F. (2024). Review of Application YOLOv8 in Medical Imaging. *Indonesian Applied Physics Letters*, 5(1), 23–33. <https://doi.org/10.20473/iapl.v5i1.57001>

- Xu, J., Zhang, Y., & Miao, D. (2020). Three-way confusion matrix for classification: A measure driven view. *Information Sciences*, 507, 772–794. <https://doi.org/10.1016/j.ins.2019.06.064>
- Yao, G., Zhu, S., Zhang, L., & Qi, M. (2024). HP-YOLOv8: High-Precision Small Object Detection Algorithm for Remote Sensing Images. *Sensors*, 24(15), 4858. <https://doi.org/10.3390/s24154858>
- Zhou, L., Yin, X., Zhang, T., Feng, Y., Zhao, Y., Jin, M., Peng, M., Xing, C., Li, F., Wang, Z., Wei, G., Jia, X., Liu, Y., Wu, X., & Lu, L. (2021a). Detection and Semiquantitative Analysis of Cardiomegaly, Pneumothorax, and Pleural Effusion on Chest Radiographs. *Radiology: Artificial Intelligence*, 3(4), e200172. <https://doi.org/10.1148/ryai.2021200172>
- Zhou, L., Yin, X., Zhang, T., Feng, Y., Zhao, Y., Jin, M., Peng, M., Xing, C., Li, F., Wang, Z., Wei, G., Jia, X., Liu, Y., Wu, X., & Lu, L. (2021b). Detection and Semiquantitative Analysis of Cardiomegaly, Pneumothorax, and Pleural Effusion on Chest Radiographs. *Radiology: Artificial Intelligence*, 3(4), e200172. <https://doi.org/10.1148/ryai.2021200172>

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