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Raihan Ichlasul Akmal, Ir. Unan Yusmaniar Oktiawati, S.T., M.Sc., Ph.D., IPU.
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DAFTAR PUSTAKA

[1] M. H. Yap, R. Hachiuma, A. Alavi, R. Brüngel, B. Cassidy, M. Goyal, H. Zhu, J. Rückert, M. Olshansky, X. Huang, Y. L. Yap, dan H. B. Lim, "Deep Learning in Diabetic Foot Ulcers Detection: A Comprehensive Evaluation," *Computers in Biology and Medicine*, vol. 135, Art. no. 104596, 2021.

[2] S. A. W. Kusumaningrum, O. Soleh, dan D. Apriani, "Pelatihan Deteksi Diabetic Foot Ulcer (DFU) Berbasis Citra Digital Menggunakan *Deep Learning* untuk Tenaga Kesehatan di Puskesmas," *ABDINE: Jurnal Pengabdian Masyarakat*, vol. 5, no. 2, pp. 358–371, 2025.

[3] A. Brehmer, C. Seibold, J. Egger, K. Majjouti, M. Tapp-Herrenbrück, H. Pinnekamp, V. Priester, M. Aleithe, U. Fischer, B. Hosters, dan J. Kleesiek, "Fine-Grained Classification of Pressure Ulcers and Incontinence-Associated Dermatitis Using Multimodal Deep Learning: Algorithm Development and Validation Study," *AI*, 2025.

[4] I.-A. Herdea, D. Tiwari, J. Oyekan, dan A. Tiwari, "Data Augmentation Framework for Improved Classification in Object Detectors," *IEEE Access*, vol. 13, 2025, doi: 10.1109/ACCESS.2025.3539455.

[5] B. Aldughayfiq, F. Ashfaq, N. Z. Jhanjhi, dan M. Humayun, "YOLO-Based Deep Learning Model for Pressure Ulcer Detection and Classification," *Healthcare*, vol. 11, no. 9, Art. no. 1222, 2023, doi: 10.3390/healthcare11091222.

[6] M. Azeem, M. Zaman, A. Akhunzada, T. Kehkashan, I. Ashraf, dan A. Rehman, "Optimizing Diabetic Foot Ulcer Detection: Leveraging SSD and YOLO Architectures," dalam *Proceedings of the International Conference on Computing and Machine Intelligence*, 2024.

[7] M. S. I. Sumon, S. B. Alam, R. Rahman, R. Sarmun, M. M. A. Mahedi, Z. B. Mahbub, R. Habib, dan M. E. H. Chowdhury, "FootSegONN: An Ensemble

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of Self-ONN-Based Models for Diabetic Foot Ulcer Segmentation," *Neural Computing and Applications*, 2026.

[8] R. Sarmun, M. E. H. Chowdhury, M. Murugappan, A. Aqel, M. Ezzuddin, S. M. Rahman, A. Khandakar, S. Akter, R. Alfkey, dan A. Hasan, "Diabetic Foot Ulcer Detection: Combining Deep Learning Models for Improved Localization," *Cognitive Computation*, vol. 16, pp. 1413–1431, 2024, doi: 10.1007/s12559-024-10267-3.

[9] P. Suganthi dan C. R. Rene Robin, "SoleScan: Innovating Diabetic Foot Ulcer Identification and Evaluation," dalam *Proceedings of the International Conference on Intelligent Systems*, 2024.

[10] M. H. Tusar, F. Fayyazbakhsh, N. Zendehdel, E. Mochalin, I. Melnychuk, L. Gould, dan M. C. Leu, "AI-Powered Image-Based Assessment of Pressure Injuries Using You Only Look Once Version 8 (YOLOv8) Models," *Advances in Wound Care*, 2025, doi: 10.1089/wound.2024.0245.

[11] I. Sagadevan, A. R. Devi S, R. Nersisson, A. Pandey, dan M. Kumar, "YOLO Based Diabetic Foot Ulcer Detection and Disease Progression Analysis," dalam *Proceedings of the International Conference on Intelligent Computing*, 2025.

[12] R. Zhang, D. Tian, D. Xu, W. Qian, dan Y. Yao, "A Survey of Wound Image Analysis Using Deep Learning: Classification, Detection, and Segmentation," *IEEE Access*, vol. 10, pp. 76812–76832, 2022, doi: 10.1109/ACCESS.2022.3194529.

[13] J. Weng, "Research on Flame Detection Algorithm Based on YOLOv26," in *2026 International Conference on Communication Networks and Machine Learning (CNML)*, 2026, pp. 731–735, doi: 10.1109/CNML68938.2026.11452316.

[14] M. T. Okano, W. A. C. Lopes, and S. M. Ruggero, "Performance Benchmarking of YOLOV26 and YOLOv8 (n/s) Across Raspberry Pi

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Generations," in *2026 6th International Conference on Electrical, Computer and Energy Technologies (ICECET)*, Rome, Italy, 2026, doi: 10.1109/ICECET65726.2026.11633052.

[15] Y. Li, "Image Processing Technology Based on Computer Vision Algorithm," *Academic Journal of Computing & Information Science*, vol. 7, no. 1, 2024.

[16] H. Zhang, "Research on the Application of the Computer Vision Technology in Image Processing," *Academic Journal of Computing & Information Science*, vol. 5, no. 1, 2022.

[17] A. Kumar and S. Patel, "Optimizing Digital Filters for Noise Reduction in Medical Image Processing," *International Journal of Advanced Engineering and Technology*, 2024.

[18] P. Kumar and R. Singh, "Object Detection and Classification in Images Using YOLO Algorithm," *International Journal of Scientific Research in Engineering and Management (IJSREM)*, vol. 8, no. 5, 2024.

[19] M. Sharma, A. Gupta, and R. Verma, "Review of Machine Learning and Deep Learning Techniques for Medical Image Analysis," *International Journal of Scientific Research in Engineering and Management (IJSREM)*, vol. 8, no. 4, 2024.

[20] S. R. Patel, V. Sharma, and P. Kumar, "Deep Learning Approaches for Enhancing Image Classification Accuracy in Medical Imaging," *International Journal of Scientific Research in Engineering and Management (IJSREM)*, vol. 8, no. 5, 2024.

[21] A. Singh and R. Mehta, "Comparative Analysis of Deep Learning Architectures for Image Classification," *International Journal of Scientific Research in Engineering and Management (IJSREM)*, vol. 8, no. 5, 2024.

[22] X. Wang, L. Chen, and Y. Zhao, "Research on the Integration Mechanism of Deep Learning and Computer Vision: Exploring Pathways to Transform

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GADJAH MADA
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Image Processing Paradigms," *Academic Journal of Computing & Information Science*, vol. 7, no. 3, 2024.

[23] M. Elhoseny, A. A. Abd El-Latif, and H. M. Abbas, "A Review of Deep Metric Learning Methods in Disease Detection on Medical Images," *IEEE Access*, vol. 12, pp. 104215–104245, 2024.

[24] M. Almutairi, A. Alshammari, and M. Alqahtani, "A Benchmark Review of YOLO Algorithm Developments for Object Detection," *International Journal of Advanced Computer Science and Applications*, vol. 15, no. 2, 2024.

[25] S. Das, P. Roy, and A. Mukherjee, "Exploring the Frontier of Object Detection: A Deep Dive into YOLOv8 and the COCO Dataset," *International Journal of Advanced Computer Science and Applications*, vol. 15, no. 6, 2024.

[26] S. Ghumman, F. Di Troia, W. Andreopoulos, M. Stamp, and S. Rai, "AGRO: An autonomous AI rover for precision agriculture," arXiv preprint arXiv:2505.01200, 2025.