DAFTAR PUSTAKA

[1] F. Psarommatis, G. May, and V. Azamfirei, "Zero defect manufacturing in 2024: a holistic literature review for bridging the gaps and forward outlook," *Int. J. Prod. Res.*, pp. 1–37, Aug. 2024, doi: 10.1080/00207543.2024.2388217.

[2] J. Aust and D. Pons, "Assessment of Aircraft Engine Blade Inspection Performance Using Attribute Agreement Analysis," *Safety*, vol. 8, no. 2, p. 23, Mar. 2022, doi: 10.3390/safety8020023.

[3] R. R. A. Guste, K. A. A. Mariñas, and A. K. S. Ong, "Efficiency Analysis of Die Attach Machines Using Overall Equipment Effectiveness Metrics and Failure Mode and Effects Analysis with an Ishikawa Diagram," *Machines*, vol. 12, no. 7, p. 467, Jul. 2024, doi: 10.3390/machines12070467.

[4] D. Tan and S. Prayogi, "Deteksi Otomatis Penggunaan APD pada Pekerja Migas Menggunakan Deep Learning dan Computer Vision," *Techno.Com*, vol. 24, no. 3, pp. 834–842, Aug. 2025, doi: 10.62411/tc.v24i3.13449.

[5] A. Rahimi, M. Anvaripour, and K. Hayat, "Object Detection using Deep Learning in a Manufacturing Plant to Improve Manual Inspection," in *2021 IEEE International Conference on Prognostics and Health Management (ICPHM)*, IEEE, Jun. 2021, pp. 1–7. doi: 10.1109/ICPHM51084.2021.9486529.

[6] U. Sirisha, S. P. Praveen, P. N. Srinivasu, P. Barsocchi, and A. K. Bhoi, "Statistical Analysis of Design Aspects of Various YOLO-Based Deep Learning Models for Object Detection," *Int. J. Comput. Intell. Syst.*, vol. 16, no. 1, p. 126, Aug. 2023, doi: 10.1007/s44196-023-00302-w.

[7] B. Liu, J. Luo, and H. Huang, "Toward automatic quantification of knee osteoarthritis severity using improved Faster R-CNN," *Int. J. Comput. Assist. Radiol. Surg.*, vol. 15, no. 3, pp. 457–466, Mar. 2020, doi: 10.1007/s11548-019-02096-9.

[8] T. Diwan, G. Anirudh, and J. V. Tembhurne, "Object detection using YOLO: challenges, architectural successors, datasets and applications," *Multimed. Tools Appl.*, vol. 82, no. 6, pp. 9243–9275, Mar. 2023, doi: 10.1007/s11042-022-13644-y.

[9] X. Han, J. Chang, and K. Wang, "Real-time object detection based on YOLO-v2 for tiny vehicle object," *Procedia Comput. Sci.*, vol. 183, pp. 61–72, 2021, doi: 10.1016/j.procs.2021.02.031.

[10] J. Nuralim, N. Fath, A. Musafa, S. Sujono, and S. BROTO, "Design Of Spherical Object Detection System With Yolov4 Framework Method," *J. Maest.*, vol. 5, no. 2, pp. 289–294, 2022, [Online]. Available:

https://jom.ft.budiluhur.ac.id/index.php/maestro/article/view/531

[11] F. Agustina, "Deteksi Kematangan Buah Pepaya Menggunakan Algoritma YOLO Berbasis Android," *J. Ilm. Infokam*, vol. 18, no. 2, pp. 70–78, Dec. 2022, doi: 10.53845/infokam.v18i2.320.

[12] J. Lee and K. Hwang, "YOLO with adaptive frame control for real-time object detection applications," *Multimed. Tools Appl.*, vol. 81, no. 25, pp. 36375–36396, Oct. 2022, doi: 10.1007/s11042-021-11480-0.

[13] Q. Luo *et al.*, "Automated Visual Defect Classification for Flat Steel Surface: A Survey," *IEEE Trans. Instrum. Meas.*, vol. 69, no. 12, pp. 9329–9349, Dec. 2020, doi: 10.1109/TIM.2020.3030167.

[14] W. Liu, J. Hu, and J. Qi, "Resistance Spot Welding Defect Detection Based on Visual Inspection: Improved Faster R-CNN Model," *Machines*, vol. 13, no. 1, p. 33, Jan. 2025, doi: 10.3390/machines13010033.

[15] R. Wei, Y. Song, and Y. Zhang, "Enhanced Faster Region Convolutional Neural Networks for Steel Surface Defect Detection," *ISIJ Int.*, vol. 60, no. 3, pp. 539–545, Mar. 2020, doi: 10.2355/isijinternational.ISIJINT-2019-335.

[16] M. Chandra, S. Rajak, and V. K.E.K, "Deep learning-based framework for the observation of real-time melt pool and detection of anomaly in wire-arc additive manufacturing," *Mater. Manuf. Process.*, vol. 39, no. 6, pp. 761–777, Apr. 2024, doi: 10.1080/10426914.2023.2254386.

[17] H. F. Le, L. J. Zhang, and Y. X. Liu, "Surface Defect Detection of Industrial Parts Based on YOLOv5," *IEEE Access*, vol. 10, pp. 130784–130794, 2022, doi: 10.1109/ACCESS.2022.3228687.

[18] C. Zhang, C. Gu, Q. Duan, and S. Zhao, "SOE-YOLO: A Small-Object Enhancement Detection Network," *IEEE Sens. J.*, vol. 25, no. 13, pp. 24849–24862, Jul. 2025, doi: 10.1109/JSEN.2025.3568844.

[19] J. Wei, G. Liu, S. Liu, and Z. Xiao, "A novel algorithm for small object detection based on YOLOv4," *PeerJ Comput. Sci.*, vol. 9, p. e1314, Mar. 2023, doi: 10.7717/peerj-cs.1314.

[20] J. Huai, Y. Zhuang, Y. Lin, G. Jozkow, Q. Yuan, and D. Chen, "Continuous-Time Spatiotemporal Calibration of a Rolling Shutter Camera-IMU System," *IEEE Sens. J.*, vol. 22, no. 8, pp. 7920–7930, Apr. 2022, doi: 10.1109/JSEN.2022.3152572.

[21] J. Chen *et al.*, "A Review of Recent Advances in High-Dynamic-Range CMOS Image Sensors," *Chips*, vol. 4, no. 1, p. 8, Mar. 2025, doi: 10.3390/chips4010008.

[22] X. Peng, L. Kong, and X. Sun, “Design of a composite lighting system based on a freeform and a rod lens for machine vision,” *Appl. Opt.*, vol. 61, no. 8, p. 2108, Mar. 2022, doi: 10.1364/AO.449810.

[23] S. Yu *et al.*, “Method and Installation for Efficient Automatic Defect Inspection of Manufactured Paper Bowls,” *Photonics*, vol. 10, no. 6, p. 686, Jun. 2023, doi: 10.3390/photonics10060686.

[24] A. Albanese, M. Nardello, G. Fiacco, and D. Brunelli, “Tiny Machine Learning for High Accuracy Product Quality Inspection,” *IEEE Sens. J.*, vol. 23, no. 2, pp. 1575–1583, Jan. 2023, doi: 10.1109/JSEN.2022.3225227.

[25] M. Sága, V. Bulej, N. Čuboňova, I. Kuric, I. Virgala, and M. Eberth, “Case study: Performance analysis and development of robotized screwing application with integrated vision sensing system for automotive industry,” *Int. J. Adv. Robot. Syst.*, vol. 17, no. 3, May 2020, doi: 10.1177/1729881420923997.

[26] Coilcraft, “Shielded Power Inductors – EPL2014,” 583-2. [Online]. Available: https://www.coilcraft.com/en-us/products/power/shielded-inductors/molded-inductor/epl/epl2014/

[27] S. Hossain *et al.*, “Region of interest (ROI) selection using vision transformer for automatic analysis using whole slide images,” *Sci. Rep.*, pp. 1–14, 2023, doi: 10.1038/s41598-023-38109-6.

[28] Z. Shi, H. Wang, and C.-S. Leung, “Constrained Center Loss for Convolutional Neural Networks,” *IEEE Trans. Neural Networks Learn. Syst.*, vol. 34, no. 2, pp. 1080–1088, Feb. 2023, doi: 10.1109/TNNLS.2021.3104392.

[29] A. A. S. Raad, “Segmentasi Citra Pada Robot Sepak Bola Beroda Menggunakan Multilayer Neural Network Dan Fitur Warna Hsv,” *Institus Teknol. Sepuluh Novemb.*, 2018.

[30] S. A. Rizkita, P. M. Izzati, U. Adhirajasa, R. Sanjaya, and B. Barat, “Segmentasi Warna Pada Gambar Bunga Forget Me Not dengan Metode,” vol. 4, no. 1, pp. 9–17, 2024.

[31] M. Utami, E. D. Putra, and U. M. Bengkulu, “Deteksi Objek Kualitas Daun Sawi Menggunakan Metode HSV Color dan Color Blob,” vol. 5, pp. 85–93, 2023.

[32] M. A. Amrozi, D. F. Sw, and R. Wahyusari, “Perbandingan Segmentasi Ruang Warna Hsv Dan Ycbcr Untuk Deteksi Objek,” *INFOMATEK J. Inform. Manaj. dan Teknol.*, vol. 26, no. November, pp. 217–222, 2024, doi: 10.23969/infomatek.v26i2.19025.

[33] X. Zhu *et al.*, “Comparative analysis of active contour and convolutional neural network in rapid left-ventricle volume quantification using echocardiographic imaging,” *Comput. Methods Programs*, vol. 108, no. 2, p. 159a, 2020, doi: 10.1016/j.bpj.2014.11.874.

[34] Y. Havrylenko, Y. Kholodniak, S. Halko, O. Vershkov, and L. Bondarenko, “Interpolation with Specified Error of a Point Series Belonging to,” pp. 1–13, 2021.

[35] A. Septiarini, H. Hamdani, H. Rahmania, and K. Anwar, “Scientia Horticulturae Automatic image segmentation of oil palm fruits by applying the contour- based approach,” *Sci. Hortic. (Amsterdam).*, no. June, p. 108939, 2019, doi: 10.1016/j.scienta.2019.108939.

[36] D. Bhatt *et al.*, “CNN Variants for Computer Vision: History, Architecture, Application, Challenges and Future Scope,” *Electronics*, vol. 10, no. 20, p. 2470, Oct. 2021, doi: 10.3390/electronics10202470.

[37] Soner Yıldırım, “Activation Functions in Neural Networks,” Towards Datascience. [Online]. Available: https://towardsdatascience.com/activation-functions-in-neural-networks-eb8c1ba565f8/

[38] H. Kahdum and L. Abednoor, “A Review of the Overfitting Problem in Convolution Neural Network and Remedy Approaches,” vol. 15, no. 2, 2023.

[39] A. K. Prajapati and U. K. Singh, “An Optimal Solution to the Overfitting and Underfitting Problem of Healthcare Machine Learning Models,” pp. 77–84, 2023.

[40] H. Li, J. Li, X. Guan, B. Liang, Y. Lai, and X. Luo, “Research on overfitting of deep learning,” *2019 15th Int. Conf. Comput. Intell. Secur.*, pp. 78–81, 2019, doi: 10.1109/CIS.2019.00025.

[41] A. Fadjeri, “Klasifikasi Gambar Batu-Kertas-Gunting Menggunakan Convolutional Neural Network dengan Fungsi Callback untuk Mencegah Overfitting,” vol. 4, no. 2, 2024.

[42] R. Rahmat, “Implementasi Object Detection Pada Sistem Kendali Arah Kapal Dengan Algoritma Yolo,” Universitas Maritim Raja Ali Haji, 2023.

[43] Z. Zheng *et al.*, “Enhancing Geometric Factors in Model Learning and Inference for Object Detection and Instance Segmentation,” *IEEE Trans. Cybern.*, vol. 52, no. 8, pp. 8574–8586, Aug. 2022, doi: 10.1109/TCYB.2021.3095305.

[44] R. Khanam and M. Hussain, “What is YOLOv5: A deep look into the internal features of the popular object detector,” pp. 3–10, 2024.

[45] M. Rauf and L. Kristiana, “Implementasi backbone CSPDarknet53 pada algoritma YOLOv4 sebagai sistem pendeteksi wajah manusia,” vol. 2, no. 11, pp. 1–8, 2024.

[46] Z. Yang, Q. Guan, K. Zhao, J. Yang, X. Xu, and Y. Tang, “Multi-Branch Auxiliary Fusion YOLO with Re-parameterization Heterogeneous Convolutional for accurate object detection,” vol. 1, pp. 16–21.

[47] B. P. Nugroho, Y. Prihati, and S. T. Galih, “Implementasi algoritma yolo v5 dalam rancangan aplikasi pendeteksi plat nomor kendaraan implementation of yolo v5 algorithm in vehicle license plate detection application design,” vol. 7, pp. 851–859, 2024.

[48] S. K. Jaiswal and R. Agrawal, “A Comprehensive Review of YOLOv5: Advances in Real-Time Object Detection,” *Int. J. Innov. Res. Comput. Sci. Technol.*, vol. 12, no. 3, pp. 75–80, 2024, doi: https://doi.org/10.55524/ijircst.2024.12.3.12.

[49] F. Folgado, D. Calderón, I. González, and A. Calderón, “Review of Industry 4.0 from the Perspective of Automation and Supervision Systems: Definitions, Architectures and Recent Trends,” *Electronics*, vol. 13, no. 4, p. 782, Feb. 2024, doi: 10.3390/electronics13040782.

[50] M. Sujatha *et al.*, “IoT and Machine Learning-Based Smart Automation System for Industry 4.0 Using Robotics and Sensors,” *J. Nanomater.*, vol. 2022, no. 1, Jan. 2022, doi: 10.1155/2022/6807585.

[51] A. Khadatkar, S. M. Mathur, K. Dubey, and V. BhusanaBabu, “Development of embedded automatic transplanting system in seedling transplanters for precision agriculture,” *Artif. Intell. Agric.*, vol. 5, pp. 175–184, 2021, doi: 10.1016/j.aiia.2021.08.001.

[52] J. Bian *et al.*, “Machine Learning in Real-Time Internet of Things (IoT) Systems: A Survey,” *IEEE Internet Things J.*, vol. 9, no. 11, pp. 8364–8386, Jun. 2022, doi: 10.1109/JIOT.2022.3161050.

[53] B. Salah, “Real-Time Implementation of a Fully Automated Industrial System Based on IR 4.0 Concept,” *Actuators*, vol. 10, no. 12, p. 318, Nov. 2021, doi: 10.3390/act10120318.

[54] Surahman, “Perancangan Solar Tracker Menggunakan Sensor Bh1750 Untuk Pengoptimalan Daya Di Laboratorium Energi Baru Terbarukan Universitas Maritim Raja Ali Haji,” Universitas Maritim Raja Ali Haji, 2024.

[55] M. Noviansyah and H. Saiyar, “Perancangan Alat Kontrol Relay Lampu Rumah Via Mobile,” *Akbar Juara*, vol. 4, no. 4, pp. 85–97, 2019, [Online]. Available: https://akrabjuara.com/index.php/akrabjuara/article/view/778

[56] M. A. M. Alhassan and E. Yılmaz, “Evaluating YOLOv4 and YOLOv5 for Enhanced Object Detection in UAV-Based Surveillance,” *Processes*, vol. 13, no. 1, p. 254, Jan. 2025, doi: 10.3390/pr13010254.

[57] Z. Chen, G. Yang, and F. Huang, “Intelligent machine vision for industrial inspection,” in *Proc.SPIE*, Sep. 2025, p. 137930K. doi: 10.1117/12.3077550.

[58] S. Sundaram and A. Zeid, “Artificial Intelligence-Based Smart Quality Inspection for Manufacturing,” *Micromachines*, vol. 14, no. 3, p. 570, Feb. 2023, doi: 10.3390/mi14030570.

[59] H. Ahmed and J. Lee, “Development of autonomous target recognition and scanning technology for pulse-echo ultrasonic propagation imager,” 2019, doi: 10.1177/1475921719874823.