DAFTAR PUSTAKA

[1]   R. Marlon *et al.*, "Penerapan Artificial Inteligence (AI) pada Robot Asuhan Keperawatan NAR dalam Peningkatan Efektivitas Kinerja Kerja di Rumah Sakit," *J. Inf. Syst. Technol.*, vol. 01, no. 02, pp. 169–175, 2020, [Online]. Available: www.covid19.co.id/

[2]   Tony, "Analisis dan Perencanaan Teknologi Pada Robot Sepak Bola," *J. Ilmu Komput. dan Inf.*, vol. 3, no. 1, pp. 46–54, 2010.

[3]   N. T. Wirawan, D. Defnizal, and R. Nadia Ernes, "Pembuatan Teknologi Robotik Dalam Dunia Militer Sebagai Media Pemantau Dan Negosiasi Berbasiskan Artificial Intelligence," *JURTEKSI (Jurnal Teknol. dan Sist. Informasi)*, vol. 6, no. 2, pp. 155–162, 2020, doi: 10.33330/jurteksi.v6i2.538.

[4]   R. C. Smith and P. Cheeseman, "On the Representation and Estimation of Spatial Uncertainty," *Int. J. Rob. Res.*, vol. 5, no. 4, pp. 56–68, 1986, doi: 10.1177/027836498600500404.

[5]   M. Majumder and C. Wilmot, "Automated Vehicle Counting from Pre-Recorded Video Using You Only Look Once (YOLO) Object Detection Model," *J. Imaging*, vol. 9, no. 7, 2023, doi: 10.3390/jimaging9070131.

[6]   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, 2023, doi: 10.1007/s11042-022-13644-y.

[7]   S. S. Sumit, D. R. Awang Rambli, S. Mirjalili, M. M. Ejaz, and M. S. U. Miah, "ReSTiNet: On Improving the Performance of Tiny-YOLO-Based CNN Architecture for Applications in Human Detection," *Appl. Sci.*, vol. 12, no. 18, 2022, doi: 10.3390/app12189331.

[8]   S. M. Abas, A. M. Abdulazeez, and D. Q. Zeebaree, "A YOLO and convolutional neural network for the detection and classification of leukocytes in leukemia," *Indones. J. Electr. Eng. Comput. Sci.*, vol. 25, no. 1, pp. 200–213, 2022, doi: 10.11591/ijeecs.v25.i1.pp200-213.

[9]   Y. Zheng and J. Ge, "Binocular intelligent following robot based on YOLO-LITE," *MATEC Web Conf.*, vol. 336, p. 03002, 2021, doi: 10.1051/matecconf/202133603002.

[10]   M. Maity, S. Banerjee, and S. Sinha Chaudhuri, "Faster R-CNN and YOLO based Vehicle detection: A Survey," *Proc. - 5th Int. Conf. Comput. Methodol. Commun. ICCMC 2021*, no. Iccmc, pp. 1442–1447, 2021, doi: 10.1109/ICCMC51019.2021.9418274.

[11]   P. Jiang, D. Ergu, F. Liu, Y. Cai, and B. Ma, "A Review of Yolo Algorithm Developments," *Procedia Comput. Sci.*, vol. 199, pp. 1066–1073, 2021, doi: 10.1016/j.procs.2022.01.135.

[12]   M. McKendrick, S. Yang, and G. A. McLeod, "The use of artificial intelligence and robotics in regional anaesthesia," *Anaesthesia*, vol. 76, no. S1, pp. 171–181, 2021, doi: 10.1111/anae.15274.

[13]   T. Kattenborn, J. Leitloff, F. Schiefer, and S. Hinz, "Review on Convolutional Neural Networks (CNN) in vegetation remote sensing," *ISPRS J. Photogramm. Remote Sens.*, vol. 173, no. July 2020, pp. 24–49, 2021, doi: 10.1016/j.isprsjprs.2020.12.010.

[14]   A. Azizi, "Applications of Artificial Intelligence Techniques to Enhance Sustainability of Industry 4.0: Design of an Artificial Neural Network Model as Dynamic Behavior Optimizer of Robotic Arms," *Complexity*, vol. 2020, 2020, doi: 10.1155/2020/8564140.

[15]   Y. Wang, J. Wu, and H. Li, "Human Detection Based on Improved Mask R-CNN," *J. Phys. Conf. Ser.*, vol. 1575, no. 1, 2020, doi: 10.1088/1742-6596/1575/1/012067.

[16]   M. Li, Z. Zhang, L. Lei, X. Wang, and X. Guo, "Agricultural greenhouses detection in high-resolution satellite images based on convolutional neural networks: Comparison of faster R-CNN, YOLO v3 and SSD," *Sensors (Switzerland)*, vol. 20, no. 17, pp. 1–14, 2020, doi: 10.3390/s20174938.

[17]   Z. Cao, T. Liao, W. Song, Z. Chen, and C. Li, "Detecting the shuttlecock for a badminton robot: A YOLO based approach," *Expert Syst. Appl.*, vol. 164, no. September 2019, p. 113833, 2021, doi: 10.1016/j.eswa.2020.113833.

[18]   D. Wu, S. Lv, M. Jiang, and H. Song, "Using channel pruning-based YOLO v4 deep learning algorithm for the real-time and accurate detection of apple flowers in natural environments," *Comput. Electron. Agric.*, vol. 178, no. July, p. 105742, 2020, doi: 10.1016/j.compag.2020.105742.

[19]   G. Matthews *et al.*, "Evolution and revolution: Personality research for the coming world of robots, artificial intelligence, and autonomous systems," *Pers. Individ. Dif.*, vol. 169, no. March, p. 109969, 2021, doi: 10.1016/j.paid.2020.109969.

[20]   A. Khan, A. Sohail, U. Zahoora, and A. S. Qureshi, *A survey of the recent architectures of deep convolutional neural networks*, vol. 53, no. 8. Springer Netherlands, 2020. doi: 10.1007/s10462-020-09825-6.

[21]   S. Wasilow and J. B. Thorpe, "Artificial intelligence, robotics, ethics, and the military: A Canadian perspective," *AI Mag.*, vol. 40, no. 1, pp. 37–48,

2019, doi: 10.1609/aimag.v40i1.2848.

[22]   T. Lesort, V. Lomonaco, A. Stoian, D. Maltoni, D. Filliat, and N. Díaz-Rodríguez, "Continual learning for robotics: Definition, framework, learning strategies, opportunities and challenges," *Inf. Fusion*, vol. 58, pp. 52–68, 2020, doi: 10.1016/j.inffus.2019.12.004.

[23]   V. Sharma and R. N. Mir, "Saliency guided faster-RCNN (SGFr-RCNN) model for object detection and recognition," *J. King Saud Univ. - Comput. Inf. Sci.*, vol. 34, no. 5, pp. 1687–1699, 2022, doi: 10.1016/j.jksuci.2019.09.012.

[24]   D. P. Lestari, R. Kosasih, T. Handhika, Murni, I. Sari, and A. Fahrurozi, "Fire Hotspots Detection System on CCTV Videos Using You only Look Once (YOLO) Method and Tiny YOLO Model for High Buildings Evacuation," *Proc. - 2019 2nd Int. Conf. Comput. Informatics Eng. Artif. Intell. Roles Ind. Revolut. 4.0, IC2IE 2019*, pp. 87–92, 2019, doi: 10.1109/IC2IE47452.2019.8940842.

[25]   H. Li and L. Shi, "Robust event-based object tracking combining correlation filter and cnn representation," *Front. Neurorobot.*, vol. 13, no. October, pp. 1–11, 2019, doi: 10.3389/fnbot.2019.00082.

[26]   P. Voigtlaender *et al.*, "Mots: Multi-object tracking and segmentation," *Proc. IEEE Comput. Soc. Conf. Comput. Vis. Pattern Recognit.*, vol. 2019-June, pp. 7934–7943, 2019, doi: 10.1109/CVPR.2019.00813.

[27]   B. Chen and X. Miao, "Distribution Line Pole Detection and Counting Based on YOLO Using UAV Inspection Line Video," *J. Electr. Eng. Technol.*, vol. 15, no. 1, pp. 441–448, 2020, doi: 10.1007/s42835-019-00230-w.

[28]   Y. Tian, G. Yang, Z. Wang, H. Wang, E. Li, and Z. Liang, "Apple detection during different growth stages in orchards using the improved YOLO-V3 model," *Comput. Electron. Agric.*, vol. 157, no. January, pp. 417–426, 2019, doi: 10.1016/j.compag.2019.01.012.

[29]   Y. Lu, "Artificial intelligence: a survey on evolution, models, applications and future trends," *J. Manag. Anal.*, vol. 6, no. 1, pp. 1–29, 2019, doi: 10.1080/23270012.2019.1570365.

[30]   R. Huang, J. Pedoeem, and C. Chen, "YOLO-LITE: A Real-Time Object Detection Algorithm Optimized for Non-GPU Computers," *Proc. - 2018 IEEE Int. Conf. Big Data, Big Data 2018*, pp. 2503–2510, 2019, doi: 10.1109/BigData.2018.8621865.

[31]   Institute of Electrical and Electronics Engineers. Ukraine Section. (East) AP/MTT/ED/AES/GRS/NPS Joint Chapter, Institute of Electrical and

Electronics Engineers. Ukraine Section. SP/AES Joint Chapter, and Institute of Electrical and Electronics Engineers, "MMET 2018 proceedings : 2018 IEEE 17th International Conference on Mathematical Methods in Electromagnetic Theory : Kyiv, Ukraine, July 2-5, 2018," *2018 IEEE 17th Int. Conf. Math. Methods Electromagn. Theory*, pp. 294–297, 2018.

[32] X. Li, Y. Liu, Z. Zhao, Y. Zhang, and L. He, "A deep learning approach of vehicle multitarget detection from traffic video," *J. Adv. Transp.*, vol. 2018, 2018, doi: 10.1155/2018/7075814.

[33] C. Han, G. Gao, and Y. Zhang, "Real-time small traffic sign detection with revised faster-RCNN," *Multimed. Tools Appl.*, vol. 78, no. 10, pp. 13263–13278, 2019, doi: 10.1007/s11042-018-6428-0.

[34] H. Lu, Y. Li, M. Chen, H. Kim, and S. Serikawa, "Brain Intelligence: Go beyond Artificial Intelligence," *Mob. Networks Appl.*, vol. 23, no. 2, pp. 368–375, 2018, doi: 10.1007/s11036-017-0932-8.

[35] M. H. Putra, Z. M. Yussof, K. C. Lim, and S. I. Salim, "Convolutional neural network for person and car detection using YOLO framework," *J. Telecommun. Electron. Comput. Eng.*, vol. 10, no. 1–7, pp. 67–71, 2018.

[36] R. Chauhan, K. K. Ghanshala, and R. C. Joshi, "Convolutional Neural Network (CNN) for Image Detection and Recognition," *ICSCCC 2018 - 1st Int. Conf. Secur. Cyber Comput. Commun.*, pp. 278–282, 2018, doi: 10.1109/ICSCCC.2018.8703316.

[37] H. Desmon Hutahaean, B. Dwi Waluyo, and M. A. Rais, "Teknologi Identifikasi Objek Berbasis Drone Menggunakan Algoritma Sift Citra Digital," *J. Tek. Inform. Unika St. Thomas*, vol. 04, pp. 2657–1501, 2019.

[38] N. DiFonzo and P. Bordia, "Reproduced with permission of the copyright owner . Further reproduction prohibited without," *J. Allergy Clin. Immunol.*, vol. 130, no. 2, p. 556, 1998, [Online]. Available: http://dx.doi.org/10.1016/j.jaci.2012.05.050

[39] M. Widyaningsih, "Identifikasi Kematangan Buah Apel Dengan Gray Level Co-Occurrence Matrix (GLCM)," *J. SAINTEKOM*, vol. 6, no. 1, p. 71, 2017, doi: 10.33020/saintekom.v6i1.7.

[40] C. D. Mccaig, "Electric Fields in Vertebrate Repair. Edited by R. B. Borgens, K. R. Robinson, J. W. Vanable and M. E. McGinnis. Pp. 310. (Alan R. Liss, New York, 1989.) $69.50 hardback. ISBN 0 8451 4274," *Exp. Physiol.*, vol. 75, no. 2, pp. 280–281, 1990, doi: 10.1113/expphysiol.1998.sp004170.

[41] I. W. Suartika E. P, "Klasifikasi Citra Menggunakan Convolutional Neural Network (Cnn) Pada Caltech 101," *J. Tek. ITS*, vol. 5, no. 1, p. 76, 2016,

[Online]. Available: http://repository.its.ac.id/48842/

[42] J. Wu, "Introduction to Convolutional Neural Networks," *Introd. to Convolutional Neural Networks*, pp. 1–31, 2017, [Online]. Available: https://web.archive.org/web/20180928011532/https://cs.nju.edu.cn/wujx/teaching/15_CNN.pdf

[43] S. Rahman, A. Titania, A. Sembiring, M. Khairani, and Y. F. A. Lubis, "Analisis Klasifikasi Mobil Pada Gardu Tol Otomatis (GTO) Menggunakan Convolutional Neural Network (CNN)," *Explorer (Hayward).*, vol. 2, no. 2, pp. 54–60, 2022, doi: 10.47065/explorer.v2i2.286.

[44] Y. Hilman Maulana and I. Nusantara, "Identifikasi Jenis Kayu menggunakan Convolutional Neural Network dengan Arsitektur Mobilenet," *Rekayasa Sistem dan Teknologi Informasi*, vol. 1, no. 3, pp. 70–76, 2020.

[45] A. G. Howard *et al.*, "MobileNets: Efficient Convolutional Neural Networks for Mobile Vision Applications," 2017, [Online]. Available: http://arxiv.org/abs/1704.04861

[46] S. Hutchinson, G. D. Hager, and P. I. Corke, "A tutorial on visual servo control," *IEEE Trans. Robot. Autom.*, vol. 12, no. 5, pp. 651–670, 1996, doi: 10.1109/70.538972.

[47] M. Wibowo, A. Rabi', S. Suprayogi, and I. Mujahidin, "Rancang Bangun Sistem Pengamanan Rak Senjata M16 Menggunakan Rfid Dan Fingerprint," *JASIEK (Jurnal Apl. Sains, Informasi, Elektron. dan Komputer)*, vol. 1, no. 2, 2019, doi: 10.26905/jasiek.v1i2.3525.

[48] G. R. Bradski, A. Kaeller, and O. R. Media, "Learning OpenCV — Computer Vision with the OpenCV Library," no. September, p. 100, 2009.

[49] P. Devikar, "Transfer Learning for Image Classification of various dog breeds," *Int. J. Adv. Res. Comput. Eng. Technol.*, vol. 5, no. 12, pp. 2278–1323, 2016, [Online]. Available: http://ijarcet.org/wp-content/uploads/IJARCET-VOL-5-ISSUE-12-2707-2715.pdf

[50] R. Sutjiadi and T. J. Pattiasina, "Deteksi Objek menggunakan Dashboard Camera untuk Sistem Peringatan Pencegah Kecelakaan pada Mobil," *J. Teknol. Inf. dan Ilmu Komput.*, vol. 7, no. 2, pp. 427–434, 2020, doi: 10.25126/jtiik.2020712520.

[51] C. Anwar, "Deteksi Objek Berbasis Web Menggunakan Tensorflow Js dan Coco Dataset pada Framework React Js," *J. Nas. Komputasi dan Teknol. Inf.*, vol. 5, no. 6, pp. 1008–1015, 2022, doi: 10.32672/jnkti.v5i6.5464.

[52] I. N. T. A. Putra, K. S. Kartini, Y. K. Suyitno, I. M. Sugiarta, and N. K. E. Puspita, "Penerapan Library Tensorflow, Cvzone, dan Numpy pada Sistem

Deteksi Bahasa Isyarat Secara Real Time," *J. Krisnadana*, vol. 2, no. 3, pp. 412–423, 2023, doi: 10.58982/krisnadana.v2i3.335.

[53] I. D. Wijaya, U. Nurhasan, and M. A. Barata, "Implementasi Raspberry Pi Untuk Rancang Bangun Sistem Keamanan Pintu Ruang Server Dengan Pengenalan Wajah Menggunakan Metode Triangle Face," *J. Inform. Polinema*, vol. 4, no. 1, p. 9, 2017, doi: 10.33795/jip.v4i1.138.

[54] F. B. Setiawan, H. W. Kusuma, S. Riyadi, and leonardo H. Pratomo, "Penerapan PI Cam Menggunakan Program Berbasis Raspberry PI 4," *Cyclotr. J. Tek. Elektro*, vol. 5, no. 2, pp. 51–56, 2022.

[55] R. N. Rohmah and L. B. Prianggodo, "Rancang Bangun Robot Beroda dengan Object Tracking Sebagai Dasar Pengendalian Gerakan Robot," *PROtek J. Ilm. Tek. Elektro*, vol. 3, no. 2, 2016, doi: 10.33387/protk.v3i2.45.

[56] H. M. Shadiq, S. Sudjadi, and D. Darjat, "Perancangan Kamera Pemantau Nirkabel Menggunakan Raspberry Pi Model B," *Transient J. Ilm. Tek. Elektro*, vol. 3, no. 4, pp. 546–551, 2015, [Online]. Available: https://ejournal3.undip.ac.id/index.php/transient/article/view/8124

[57] I. R. Muttaqin and D. B. Santoso, "Prototype Pagar Otomatis Berbasis Arduino Uno Dengan Sensor Ultrasonic Hc-SR04," *JE-Unisla*, vol. 6, no. 2, p. 41, 2021, doi: 10.30736/je-unisla.v6i2.695.

[58] R. Bhukya, P. K. Nalli, K. S. Kadali, and M. C. Bade, "Designing of Lithium - Ion Battery Pack Rechargeable on a Hybrid System with Battery Management System (BMS) for DC Loads of Low Power Applications –A Prototype Model," *J. Phys. Conf. Ser.*, vol. 2089, no. 1, 2021, doi: 10.1088/1742-6596/2089/1/012017.

[59] R. A. Harahap and E. Susanti, "Perancangan Plts 200 Wp Dengan Solar Tracker," *Sigma Tek.*, vol. 5, no. 2, pp. 323–332, 2022, doi: 10.33373/sigmateknika.v5i2.4641.

[60] R. D. Agustia and T. A. Kiki H, "Pembangunan Prototype Aplikasi Pengawasan Dan Pengendalian Pembudidayaan Mikroalga Spirulina," *Komputa J. Ilm. Komput. dan Inform.*, vol. 7, no. 1, pp. 11–18, 2018, doi: 10.34010/komputa.v7i1.2531.

[61] T. Y. Lin *et al.*, "Microsoft COCO: Common objects in context," *Lect. Notes Comput. Sci. (including Subser. Lect. Notes Artif. Intell. Lect. Notes Bioinformatics)*, vol. 8693 LNCS, no. PART 5, pp. 740–755, 2014, doi: 10.1007/978-3-319-10602-1_48.

[62] C. N. Liunanda, S. Rostianingsih, and A. N. Purbowo, "Implementasi Algoritma YOLO pada Aplikasi Pendeteksi Senjata Tajam di Android," *J.*