

## DAFTAR PUSTAKA

- [1] Kementerian Pertanian Republik Indonesia, “Produksi Daging Ayam Ras Pedaging menurut Provinsi (Ton), 2021-2022.” Accessed: Jul. 20, 2023. [Online]. Available: <https://www.bps.go.id/id/statistics-table/2/NDg4IzI=/produksi-daging-ayam-ras-pedaging-menurut-provinsi.html>
- [2] E. Zelpina, S. Walyani, A. B. Niasono, and F. Hidayati, “Dampak infeksi *Salmonella* sp. dalam daging ayam dan produknya terhadap kesehatan masyarakat,” *Journal of Health Epidemiology and Communicable Diseases*, vol. 6, no. 1, pp. 25–32, Nov. 2020, doi: 10.22435/jhecds.v6i1.2771.
- [3] P. He *et al.*, “Research Progress in the Early Warning of Chicken Diseases by Monitoring Clinical Symptoms,” *Applied Sciences*, vol. 12, no. 11, p. 5601, May 2022, doi: 10.3390/app12115601.
- [4] W. Kusriani, F. Fathurrahmani, and R. Sayyidati, “Sistem Pakar untuk Diagnosa Penyakit Ayam Pedaging,” *Edumatic: Jurnal Pendidikan Informatika*, vol. 4, no. 2, pp. 75–84, Dec. 2020, doi: 10.29408/edumatic.v4i2.2616.
- [5] H. Hafizah and A. H. Nasyuha, “Implementasi Teorema Bayes Dalam Diagnosa Penyakit Ayam Broiler,” *Jurnal Media Informatika Budidarma*, vol. 4, no. 4, pp. 1062–1068, Oct. 2020.
- [6] D. Machuve, E. Nwankwo, N. Mduma, and J. Mbelwa, “Poultry diseases diagnostics models using deep learning,” *Front Artif Intell*, vol. 5, Aug. 2022, doi: 10.3389/frai.2022.733345.
- [7] C. Mesa-Pineda, J. L. Navarro-Ruíz, S. López-Osorio, J. J. Chaparro-Gutiérrez, and L. M. Gómez-Osorio, “Chicken Coccidiosis: From the Parasite Lifecycle to Control of the Disease,” *Front Vet Sci*, vol. 8, Dec. 2021, doi: 10.3389/fvets.2021.787653.
- [8] G. Gugsu Amede, E. Abebe, and G. Gugsu, “A Review on Poultry Coccidiosis,” *Abyss. J. Sci. Technol*, vol. 3, no. 1, pp. 1–12, 2018, doi: 10.20372/ajst.2018.3.1.76.
- [9] D. V. S. Djara, I. B. K. Ardana, and I. B. O. Winaya, “Perubahan Patologik Sekum Ayam Pedaging (*Gallus gallus*) yang Terinfeksi Koksidiosis di Kabupaten Tabanan, Bali,” *Indonesia Medicus Veterinus*, vol. 9, no. 2, pp. 187–196, Mar. 2020, doi: 10.19087/imv.2020.9.2.187.

- [10] R. Ali, “Chicken Newcastle Disease Symptoms.” Accessed: Jun. 03, 2023. [Online]. Available: <https://poultrymania.com/chicken-newcastle-disease-symptoms/>
- [11] S. S. Ewies, A. Ali, S. M. Tamam, and H. M. Madbouly, “Molecular characterization of Newcastle disease virus (genotype VII) from broiler chickens in Egypt,” *Beni Suef Univ J Basic Appl Sci*, vol. 6, no. 3, pp. 232–237, Sep. 2017, doi: 10.1016/j.bjbas.2017.04.004.
- [12] Y. Levani and A. D. Prastya, “DEMAM TIFOID: MANIFESTASI KLINIS, PILIHAN TERAPI DAN PANDANGAN DALAM ISLAM,” *Al-Iqra Medical Journal : Jurnal Berkala Ilmiah Kedokteran*, vol. 1, no. 2, pp. 10–16, Oct. 2020, doi: 10.26618/aimj.v3i1.4038.
- [13] K. M. Rachman, “Penyakit Ayam Berak Kapur: Gejala Serangan, Penyebab, Pengobatan, Hingga Cara Pencegahan,” 2021. Accessed: Jun. 29, 2023. [Online]. Available: <https://gdmorganic.com/cara-mengobati-ayam-berak-kapur-dan-berak-hijau/>
- [14] P. Computer *et al.*, “Application Of Computer Vision Detection Of Apples And Oranges Using Python Language,” *Journal of Information System, Informatics and Computing Issue Period*, vol. 6, no. 2, pp. 455–466, 2022, doi: 10.52362/jisicom.v6i2.946.
- [15] M. Sonka, V. Hlavac, and R. Boyle, *Image Processing, Analysis, and Machine Vision Fourth Edition*, 4th ed. Stamford: CENGAGE Learning, 2014.
- [16] E. Beauxis-Aussalet, “INTRODUCTION TO COMPUTER VISION DIGITAL SOCIETY SCHOOL,” 2019.
- [17] S. Li, H. Chen, Q. Wang, J. An, and J. Li, “Summary of Object Recognition,” *J Phys Conf Ser*, vol. 1651, no. 1, p. 012159, Nov. 2020, doi: 10.1088/1742-6596/1651/1/012159.
- [18] by Subba Rao Polamuri Makhan kumbhkar and D. Arul Pon Daniel, *INTRODUCTION TO DEEP LEARNING*. 2022.
- [19] J. Heaton, “Artificial Intelligence for Humans, Volume 3: Deep Learning and Neural Networks.”

- [20] L. Alzubaidi *et al.*, “Review of deep learning: concepts, CNN architectures, challenges, applications, future directions,” *J Big Data*, vol. 8, no. 1, p. 53, Mar. 2021, doi: 10.1186/s40537-021-00444-8.
- [21] A. Rahim and E. Taufiq Luthfi, “Rahim, Convolutional Neural Network untuk Kalasifikasi Penggunaan Masker CONVOLUTIONAL NEURAL NETWORK UNTUK KALASIFIKASI PENGGUNAAN MASKER.”
- [22] “What Is a Convolutional Neural Network? | 3 things you need to know.” Accessed: Dec. 21, 2023. [Online]. Available: <https://www.mathworks.com/discovery/convolutional-neural-network-matlab.html>
- [23] R. Yamashita, M. Nishio, R. K. G. Do, and K. Togashi, “Convolutional neural networks: an overview and application in radiology,” *Insights Imaging*, vol. 9, no. 4, pp. 611–629, Aug. 2018, doi: 10.1007/s13244-018-0639-9.
- [24] A. Svensson, “Exploring Object Detection and Recognition Methods for Automated Book Inventory,” Lund Institute of Technology, Lund University, Lund, 2019.
- [25] Anonym, “Rectified Linear Units (ReLU) in Deep Learning.” Accessed: Dec. 26, 2023. [Online]. Available: <https://www.kaggle.com/code/dansbecker/rectified-linear-units-relu-in-deep-learning/notebook>
- [26] D. Yang, K. M. Ngoc, I. Shin, and M. Hwang, “DPRReLU: Dynamic Parametric Rectified Linear Unit and Its Proper Weight Initialization Method,” *International Journal of Computational Intelligence Systems*, vol. 16, no. 1, p. 11, 2023, doi: 10.1007/s44196-023-00186-w.
- [27] M. R. Alwanda, R. P. K. Ramadhan, and D. Alamsyah, “Implementasi Metode Convolutional Neural Network Menggunakan Arsitektur LeNet-5 untuk Pengenalan Doodle,” *Jurnal Algoritme*, vol. 1, no. 1, pp. 45–56, Oct. 2020, doi: 10.35957/algoritme.v1i1.434.
- [28] H. Gholamalinezhad and H. Khosravi, “Pooling Methods in Deep Neural Networks, a Review,” *CoRR*, vol. abs/2009.07485, 2020, [Online]. Available: <https://arxiv.org/abs/2009.07485>

- [29] M. Zufar and B. Setiyono, "CONVOLUTIONAL NEURAL NETWORKS FOR REAL-TIME FACE RECOGNITION," Sepuluh Nopember Institute of Technology, Surabaya, 2016.
- [30] A. Yusuf, R. C. Wihandika, and C. Dewi, "Klasifikasi Emosi Berdasarkan Ciri Wajah Menggunakan Convolutional Neural Network," *Jurnal Pengembangan Teknologi Informasi dan Ilmu Komputer*, vol. 3, no. 11, pp. 10595–10604, Nov. 2019.
- [31] W. S. Eka Putra, "Klasifikasi Citra Menggunakan Convolutional Neural Network (CNN) pada Caltech 101," *Jurnal Teknik ITS*, vol. 5, no. 1, Mar. 2016, doi: 10.12962/j23373539.v5i1.15696.
- [32] T. A. Kalaycı and U. Asan, "Improving Classification Performance of Fully Connected Layers by Fuzzy Clustering in Transformed Feature Space," *Symmetry (Basel)*, vol. 14, no. 4, p. 658, Mar. 2022, doi: 10.3390/sym14040658.
- [33] C. Nwankpa, W. Ijomah, A. Gachagan, and S. Marshall, "Activation Functions: Comparison of trends in Practice and Research for Deep Learning," *CoRR*, vol. abs/1811.03378, 2018, [Online]. Available: <http://arxiv.org/abs/1811.03378>
- [34] R. Cheng, "A survey: Comparison between Convolutional Neural Network and YOLO in image identification," *J Phys Conf Ser*, vol. 1453, no. 1, p. 012139, Jan. 2020, doi: 10.1088/1742-6596/1453/1/012139.
- [35] S. Geethapriya, N. Duraimurugan, and S. P. Chokkalingam, "Real-Time Object Detection with YOLO," *Int J Eng Adv Technol*, vol. 8, no. 3 Special Issue, 2019, Accessed: Nov. 14, 2024. [Online]. Available: <https://www.ijeat.org/wp-content/uploads/papers/v8i3S/C11240283S19.pdf>
- [36] 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.
- [37] D. K. Sharma, M. Chatterjee, G. Kaur, and S. Vavilala, "Deep learning applications for disease diagnosis," in *Deep Learning for Medical Applications with Unique Data*, Elsevier, 2022, pp. 31–51. doi: 10.1016/B978-0-12-824145-5.00005-8.
- [38] A. Tiwari, "Supervised learning: From theory to applications," in *Artificial Intelligence and Machine Learning for EDGE Computing*, Elsevier, 2022, pp. 23–32. doi: 10.1016/B978-0-12-824054-0.00026-5.

- [39] D. Krstinić, M. Braović, L. Šerić, and D. Božić-Štulić, “Multi-label Classifier Performance Evaluation with Confusion Matrix,” in *Computer Science & Information Technology*, AIRCC Publishing Corporation, Jun. 2020, pp. 01–14. doi: 10.5121/csit.2020.100801.
- [40] Joe. Minichino and Joseph. Howse, *Learning OpenCV 3 computer vision with Python : unleash the power of computer vision with Python using OpenCV*. Packt Publishing, 2015.
- [41] B. Santoso and R. P. Kristianto, “IMPLEMENTASI PENGGUNAAN OPENCV PADA FACE RECOGNITION UNTUK SISTEM PRESENSI PERKULIAHAN MAHASISWA,” *SISTEMASI*, vol. 9, no. 2, p. 352, May 2020, doi: 10.32520/stmsi.v9i2.822.
- [42] K. Duraipandian, “Multiple Object Recognition Using OpenCV,” *Revista Gestão Inovação e Tecnologias*, vol. 11, no. 2, pp. 1736–1747, Jun. 2021, doi: 10.47059/revistageintec.v11i2.1795.
- [43] M. Romzi and B. Kurniawan, “PEMBELAJARAN PEMROGRAMAN PYTHON DENGAN PENDEKATAN LOGIKA ALGORITMA,” 2020.
- [44] S. Raschka, J. Patterson, and C. Nolet, “Machine Learning in Python: Main Developments and Technology Trends in Data Science, Machine Learning, and Artificial Intelligence,” *Information*, vol. 11, no. 4, p. 193, Apr. 2020, doi: 10.3390/info11040193.
- [45] G. I. E. Soen, M. Marlina, and R. Renny, “Implementasi Cloud Computing dengan Google Colaboratory pada Aplikasi Pengolah Data Zoom Participants,” *JITU : Journal Informatic Technology And Communication*, vol. 6, no. 1, pp. 24–30, Jun. 2022, doi: 10.36596/jitu.v6i1.781.
- [46] N. Wiranda, H. S. Purba, and R. A. Sukmawati, “Survei Penggunaan Tensorflow pada Machine Learning untuk Identifikasi Ikan Kawasan Lahan Basah,” *IJEIS (Indonesian Journal of Electronics and Instrumentation Systems)*, vol. 10, no. 2, p. 179, Oct. 2020, doi: 10.22146/ijeis.58315.
- [47] R. F. Muharram, “Implementasi Artificial Intelligence Untuk Deteksi Masker Secara Realtime Dengan Tensorflow Dan SSD Mobilenet Berbasis Pyton,” *JRKT (Jurnal Rekayasa Komputasi Terapan)*, vol. 1, no. 03, Sep. 2021, doi: 10.30998/jrkt.v1i03.5832.

- [48] Nasha Hikmatia A.E. and M. I. Zul, “Aplikasi Penerjemah Bahasa Isyarat Indonesia menjadi Suara berbasis Android menggunakan Tensorflow,” *Jurnal Komputer Terapan*, vol. 7, no. 1, pp. 74–83, Jun. 2021, doi: 10.35143/jkt.v7i1.4629.
- [49] A. Aryanto and M. Melvi, “PEMANFAATAN METODE WAVELET PADA ROBOT SEPAKBOLA BERBASIS MACHINE LEARNING GOOGLE TENSORFLOW,” *Journal of Energy and Electrical Engineering*, vol. 1, no. 2, May 2020, doi: 10.37058/jeee.v1i2.1552.
- [50] C. Anwar, “Deteksi Objek Berbasis Web Menggunakan Tensorflow Js dan Coco Dataset pada Framework React Js,” *Jurnal Nasional Komputasi dan Teknologi Informasi (JNKTI)*, vol. 5, no. 6, pp. 1008–1015, Dec. 2022, doi: 10.32672/jnkti.v5i6.5464.
- [51] P. Singh, N. Singh, K. K. Singh, and A. Singh, “Chapter 5 - Diagnosing of disease using machine learning,” in *Machine Learning and the Internet of Medical Things in Healthcare*, K. K. Singh, M. Elhoseny, A. Singh, and A. A. Elngar, Eds., Academic Press, 2021, pp. 89–111. doi: <https://doi.org/10.1016/B978-0-12-821229-5.00003-3>.
- [52] C. Fan, M. Chen, X. Wang, J. Wang, and B. Huang, “A Review on Data Preprocessing Techniques Toward Efficient and Reliable Knowledge Discovery From Building Operational Data,” *Front Energy Res*, vol. 9, Mar. 2021, doi: 10.3389/fenrg.2021.652801.
- [53] R. Ashgar, “Getting Started with Image Preprocessing in Python.” Accessed: Jan. 24, 2024. [Online]. Available: <https://www.kaggle.com/code/rimmelasghar/getting-started-with-image-preprocessing-in-python>
- [54] Di. Machuve, E. Nwankwo, N. Mduma, H. Mbelwa, E. Maguo, and C. Munisi, “Machine Learning Dataset for Poultry Diseases Diagnostics,” Zenodo. Accessed: Jan. 05, 2024. [Online]. Available: <https://zenodo.org/records/5801834>
- [55] Raspberry Pi Foundation, “Raspberry Pi 4 Model B.” Accessed: Jul. 02, 2023. [Online]. Available: <https://www.raspberrypi.com/products/raspberry-pi-4-model-b/>

- [56] Raspberry Pi Foundation, “Raspberry Pi 4 Model B Tech Specs.” Accessed: Dec. 22, 2023. [Online]. Available: <https://www.raspberrypi.com/products/raspberrypi-4-model-b/specifications/>
- [57] Raspberry Pi Ltd., “Raspberry Pi Camera Module 3.” Accessed: Jul. 04, 2023. [Online]. Available: <https://datasheets.raspberrypi.com/camera/camera-module-3-product-brief.pdf>
- [58] Raspberry Pi Foundation, “Raspberry Pi Camera Module 3.” Accessed: Jul. 04, 2023. [Online]. Available: <https://www.raspberrypi.com/products/camera-module-3/>
- [59] Anonym, “Optimal Positioning of The Raspberry Pi Camera.” Accessed: Jan. 25, 2024. [Online]. Available: <https://raspberrypi-guide.github.io/electronics/camera-positioning#calculations>
- [60] Anonym, “How to Build an RGB LED Circuit with an Arduino.” Accessed: Sep. 24, 2023. [Online]. Available: <https://www.learningaboutelectronics.com/Articles/Arduino-RGB-LED-circuit.php>
- [61] W. Sulaeman, E. Alimudin, and A. Sumardiono, “Sistem Pengaman Loker dengan Menggunakan Deteksi Wajah,” *Journal of Energy and Electrical Engineering*, vol. 03, no. 02, 2022.
- [62] F. Fitriansyah and Arydillah, “Penggunaan Telegram Sebagai Media Komunikasi Dalam Pembelajaran Online,” *Cakrawala: Jurnal Humaniera Bina Sarana Informatika*, vol. 20, no. 2, pp. 111–117, 2020, doi: 10.31294/jc.v20i2.
- [63] Nitesh, “How to know if a bounding box(rectangle) lies inside another bounding box(rectangle)?” Accessed: Jan. 25, 2024. [Online]. Available: <https://stackoverflow.com/questions/60949898/how-to-know-if-a-bounding-boxrectangle-lies-inside-another-bounding-boxrectan>