

DAFTAR PUSTAKA

- Adriansyah, A.R., Wibowo, E. and Panji, K. (2025) ‘Klasifikasi Gerakan Olahraga Panahan Menggunakan YOLO dan Metode LSTM’, *The Indonesian Journal of Computer Science (IJCS)*, 14(3), pp. 5058–5068. Available at: <https://doi.org/10.33022/ijcs.v14i3.4664>.
- Ahadi, A.H. dkk. (2024) “Implementasi Sistem Pendeteksi Warna Objek dengan OpenCV-Python,” *SENTRI: Jurnal Riset Ilmiah*, 3(7), hlm. 3573–3578. Tersedia pada: <https://doi.org/10.55681/sentri.v3i7.3185>.
- Arnita dkk. (2022) *Computer Vision dan Pengolahan Citra Digital*. Disunting oleh A.B. Surya. Surabaya: Pustaka Aksara. Tersedia pada: www.pustakaaksara.co.id.
- Badan Kebijakan Pembangunan Kesehatan (2023) *Survei Kesehatan Indonesia (SKI) Dalam Angka, Kota Kediri Dalam Angka*. Tersedia pada: https://drive.google.com/file/d/1rjNDG_f8xG6-Y9wmhJUnXhJ-vUFevVJC/view.
- Bass, L., Clements, P. dan Kazman, R. (2021) *Software Architecture in Practice*. Fourth. Boston: Addison-Wesley Professional.
- Bazarevsky, V. et al. (2020) *BlazePose: On-device Real-time Body Pose tracking*. Available at: <https://doi.org/10.48550/arXiv.2006.10204>.
- Budiarso, Z., Listiyono, H. dan Karim, A. (2024) “Optimizing LSTM with Grid Search and Regularization Techniques to Enhance Accuracy in Human Activity Recognition,” *Journal of Applied Data Sciences*, 5(4), hlm. 2002–2014. Tersedia pada: <https://doi.org/10.47738/jads.v5i4.433>.
- Buduma, Nithin dkk. (2022) *Fundamentals of Deep Learning*. Second. Sebastopol: O’Reilly Media, Inc.
- Carreira, J. dkk. (2022) “A Short Note on the Kinetics-700 Human Action Dataset.” Tersedia pada: <http://arxiv.org/abs/1907.06987>.
- Chaabene, H. dkk. (2021) “Home-based exercise programmes improve physical fitness of healthy older adults : A PRISMA-compliant systematic review and meta-analysis with relevance for COVID-19,” *Ageing Research Reviews*, 67. Tersedia pada: <https://doi.org/10.1016/j.arr.2021.101265>.
- Chaudhuri, A.B. (2020) *Flowchart and Algorithm Basics: The Art of Programming*. Dulles: David Pallai.
- Daniel Tanugraha, F. et al. (2022) ‘Pengenalan Gerakan Olahraga Berbasis (Long Short-Term Memory) Menggunakan Mediapipe’, *JAIIT (Journal of Advances in Information and Industrial Technology)*, 4(1), pp. 37–45. Available at: <https://doi.org/10.52435/jaiit.v4i1.182>.

- Denton, F. dkk. (2021) "Is It Really Home-Based? A Commentary on the Necessity for Accurate Definitions across Exercise and Physical Activity Programmes," *International Journal of Environmental Research and Public Health*, 18(17), hlm. 9244. Tersedia pada: <https://doi.org/10.3390/ijerph18179244>.
- Dibenedetto, G. dkk. (2025) "Comparing Human Pose Estimation through deep learning approaches: An overview," *Computer Vision and Image Understanding*, 252, hlm. 104297. Tersedia pada: <https://doi.org/10.1016/j.cviu.2025.104297>.
- Dubey, S. dan Dixit, M. (2023) "A comprehensive survey on human pose estimation approaches," *Multimedia Systems*, 29(1), hlm. 167–195. Tersedia pada: <https://doi.org/10.1007/s00530-022-00980-0>.
- Fadare, S.A. dkk. (2024) "Enhancing Physical Activity Through Information Technology: Current Trends and Future Directions," *Salud, Ciencia y Tecnologia*, 4, hlm. 950. Tersedia pada: <https://doi.org/10.56294/saludcyt2024950>.
- Fauzi, A. dan Yunial, A.H. (2025) *Testing dan QA Perangkat Lunak: Memahami Konsep, Metode, Teknik, dan Pendekatan dalam Pengujian*. Purbalingga: Eureka Media Aksara.
- Fitzpatrick, M. (2022) *Create GUI Applications with Python & Qt6 (PyQt6 Edition): The hands-on guide to making apps with Python*. Martin Fitzpatrick.
- Fleuret, F. (2024) *The Little Book of Deep Learning*. Geneva: Universite De Geneve. Tersedia pada: <https://fleuret.org/public/lbdl.pdf>.
- Galanakis, I. dkk. (2025) "Early and Late Fusion for Multimodal Aggression Prediction in Dementia Patients: A Comparative Analysis," *Applied Sciences*, 15. Tersedia pada: <https://doi.org/10.3390/app15115823>.
- Google (2024) *MediaPipe Framework Concepts*. Tersedia pada: https://ai.google.dev/edge/mediapipe/framework/framework_concepts/overview.md (Diakses: 4 November 2025).
- Google (2025a) *MediaPipe Solutions guide*. Tersedia pada: <https://ai.google.dev/edge/mediapipe/solutions/guide> (Diakses: 4 November 2025).
- Google (2025b) *Pose Landmark detection guide*. Tersedia pada: https://ai.google.dev/edge/mediapipe/solutions/vision/pose_landmarker (Diakses: 4 November 2025).
- Guo, T. dkk. (2025) "Fitness exercise evaluation system based on improved DTW algorithm," *Scientific Reports*, 15(1), hlm. 1–20. Tersedia pada: <https://doi.org/10.1038/s41598-025-02535-5>.

- Hasanah, F.N. dan Untari, R.S. (2020) *Rekayasa Perangkat Lunak*. Disunting oleh M. Suryawinata. Sidoarjo: UMSIDA Press.
- Hasselbring, W. (2021) *Benchmarking as Empirical Standard in Software Engineering Research*, *EASE* 2021. Tersedia pada: <https://doi.org/10.1145/3463274.3463361>.
- Herrmann, S.D. dkk. (2024) “2024 Adult Compendium of Physical Activities: A third update of the energy costs of human activities,” *Journal of Sport and Health Science*, 13(1), hlm. 6–12. Tersedia pada: <https://doi.org/10.1016/j.jshs.2023.10.010>.
- Hidayah, F. dkk. (2023) *Sehat Fisik itu ASIK: Aktif, Sehat, Inovatif, dan Kreatif*. Disunting oleh P. Asmarini, I. Maulana, dan J.B. Pen. Jakarta Pusat: Kementerian Pendidikan, Kebudayaan, Riset, dan Teknologi.
- Hidayat, N. dan Hati, K. (2021) “Penerapan Metode Rapid Application Development (RAD) dalam Rancang Bangun Sistem Informasi Rapor Online (SIRALINE),” *Jurnal Sistem Informasi STMIK Antar Bangsa*, 10(1), hlm. 8–17. Tersedia pada: <https://doi.org/10.51998/jsi.v10i1.352>.
- Hong, J. dkk. (2025) “Quality Analysis of YouTube-Based Exercise Programs for Typically Developing Children: Content Analysis,” *Healthcare (Switzerland)*, 13(5), hlm. 1–13. Tersedia pada: <https://doi.org/10.3390/healthcare13050560>.
- Hossen, M.A. dan Abas, P.E. (2025) “Machine Learning for Human Activity Recognition: State-of-the-Art Techniques and Emerging Trends,” *Journal of Imaging*, 11. Tersedia pada: <https://doi.org/10.3390/jimaging11030091>.
- Jocher, G., Waxmann, S., dkk. (2026) *Data Preparation*, Ultralytics YOLO Docs. Tersedia pada: <https://docs.ultralytics.com/platform/data/> (Diakses: 8 Mei 2026).
- Jocher, G., Munawar, R., dkk. (2026) *Model Prediction with Ultralytics YOLO*, Ultralytics YOLO Docs. Tersedia pada: <https://docs.ultralytics.com/modes/predict/> (Diakses: 8 Mei 2026).
- Jocher, G., Q. B., dkk. (2026) *Object Detection*, Ultralytics YOLO Docs. Tersedia pada: <https://docs.ultralytics.com/tasks/detect/> (Diakses: 8 Mei 2026).
- Jocher, G., Pderrenger, dkk. (2026) *YOLOv3, and YOLOv3u*, Ultralytics YOLO Docs. Tersedia pada: <https://docs.ultralytics.com/models/yolov3/> (Diakses: 8 Mei 2026).
- Kaseris, M., Kostavelis, I. dan Malassiotis, S. (2024) “A Comprehensive Survey on Deep Learning Methods in Human Activity Recognition,” *Machine Learning and Knowledge Extraction*, 6(2), hlm. 842–876. Tersedia pada: <https://doi.org/10.3390/make6020040>.

- Khair, M.A. dkk. (2024) “Perancangan Sistem Absensi Mahasiswa Berbasis Face Recognition di Lingkungan UPN Veteran Jakarta,” *Informatik : Jurnal Ilmu Komputer*, 20(1), hlm. 35–42. Tersedia pada: <https://doi.org/10.52958/iftk.v20i1.6696>.
- Kirk, B.J.C. dkk. (2025) “Effects of a daily, home-based, 5-minute eccentric exercise program on physical fitness, body composition, and health in sedentary individuals,” *European Journal of Applied Physiology*, 125(8), hlm. 2241–2255. Tersedia pada: <https://doi.org/10.1007/s00421-025-05757-7>.
- Kusumo, M.P. (2020) *Buku Pemantauan Aktivitas Fisik Mahendro Prasetyo Kusumo*, Yogyakarta: The Journal Publishing. Sleman: The Journal Publishing. Tersedia pada: [http://repository.umy.ac.id/bitstream/handle/123456789/35896/Buku pemantauan aktivitas fisik.pdf?sequence=1](http://repository.umy.ac.id/bitstream/handle/123456789/35896/Buku%20pemantauan%20aktivitas%20fisik.pdf?sequence=1).
- Le, V.T., Tran-Trung, K. dan Hoang, V.T. (2022) “A Comprehensive Review of Recent Deep Learning Techniques for Human Activity Recognition,” *Computational Intelligence and Neuroscience*, 2022. Tersedia pada: <https://doi.org/10.1155/2022/8323962>.
- Maesaroh, S. dkk. (2024) *Bahasa Pemrograman Python*. Disunting oleh M.R. Kurnia. Serang: Sada Kurnia Pustaka.
- Migunani (2022) *Rekayasa Perangkat Lunak*. Semarang: Yayasan Prima Agus Teknik.
- Moore, O. dkk. (2023) “PyQtGraph - High Performance Visualization for All Platforms,” *Proceedings of the 22nd Python in Science Conference*, hlm. 106–113. Tersedia pada: <https://doi.org/10.25080/gerudo-f2bc6f59-00e>.
- Müller, P.N. dkk. (2024) “IMU-Based Fitness Activity Recognition Using CNNs for Time Series Classification,” *Sensors*, 24(3). Tersedia pada: <https://doi.org/10.3390/s24030742>.
- Mutohir, T.C. dkk. (2024) *Industri Olahraga: Sumber Pertumbuhan Ekonomi Baru*. Tersedia pada: https://img-deputi2.kemenpora.go.id/files/document_file/2025/01/02/44/6736laporan-indeks-pembangunan-olahraga-2024.pdf.
- Nabijonovich, S.B. dan Najmiddin, G. (2024) “Optimizing PyQt5 Development With Qt Designer,” *Web of Teachers: Inderscience Research*, 2(4), hlm. 254–259. Tersedia pada: <https://webofjournals.com/index.php/1/article/view/1224>.
- Newbold, J.W., Rudnicka, A. dan Cox, A. (2021) “Staying Active While Staying Home: The Use of Physical Activity Technologies During Life Disruptions,” *Frontiers in Digital Health*, 3, hlm. Article 753115. Tersedia pada: <https://doi.org/10.3389/fdgth.2021.753115>.

- Niemaszyk, M. dan Truszczyńska-Baszak, A. (2023) “Musculoskeletal Injuries Associated with Yoga Practice – a Literature Review,” *Rehabilitacja Medyczna*, 27(3), hlm. 78–86. Tersedia pada: <https://doi.org/10.5604/01.3001.0016.3420>.
- Nurmaini, S. dkk. (2021) *Pengenalan Deep Learning Dan Implementasinya*. Disunting oleh Annisa Darmawahyuni. Palembang: Unsri Press.
- Okut, H. (2021) “Deep Learning for Subtyping and Predictions of Diseases: Long-Short Term Memory,” dalam *Deep Learning Applications*. London: IntechOpen. Tersedia pada: <https://doi.org/10.5772/intechopen.96180>.
- OpenCV (2025a) *OpenCV: About*. Tersedia pada: <https://opencv.org/about/> (Diakses: 4 November 2025).
- OpenCV (2025b) *OpenCV: License*. Tersedia pada: <https://opencv.org/license/> (Diakses: 4 November 2025).
- Pavlidou, E. dkk. (2023) “Revised Harris–Benedict Equation: New Human Resting Metabolic Rate Equation,” *Metabolites*, 13. Tersedia pada: <https://doi.org/10.3390/metabo13020189>.
- Powell-Wiley, T.M. dkk. (2021) “Obesity and Cardiovascular Disease: A Scientific Statement From the American Heart Association,” *Circulation*, 143(21), hlm. E984–E1010. Tersedia pada: <https://doi.org/10.1161/CIR.0000000000000973>.
- Prieto-González, P. dan Yagin, F.H. (2024) “Energy expenditure, oxygen consumption, and heart rate while exercising on seven different indoor cardio machines at maximum and self-selected submaximal intensity,” *Frontiers in Sports and Active Living*, 6, hlm. 1–9. Tersedia pada: <https://doi.org/10.3389/fspor.2024.1313886>.
- Qt Company Ltd. (2025) *Qt for Python*. Tersedia pada: <https://doc.qt.io/qtforpython-6/tutorials/index.html> (Diakses: 4 November 2025).
- Raharjo, B. (2022) *Deep Learning dengan Python*. Semarang: Yayasan Prima Agus Teknik.
- Rahman, A. dkk. (2022) *Metode Penelitian Ilmu Sosial, Penelitian*. Disunting oleh A. Masruroh. Bandung: Widina Bhakti Persada Bandung.
- Rainio, O., Teuho, J. dan Klén, R. (2024) “Evaluation metrics and statistical tests for machine learning,” *Scientific Reports*, 14. Tersedia pada: <https://doi.org/10.1038/s41598-024-56706-x>.
- Ramos, L.T. dan Sappa, A.D. (2025) “A Decade of You Only Look Once (YOLO) for Object Detection: A Review,” *IEEE Access*, 13, hlm. 192747–192794. Tersedia pada: <https://doi.org/10.1109/ACCESS.2025.3630988>.

- Sari, R.K. dkk. (2023) *Metodologi Penelitian Pendidikan*. Disunting oleh A.C. Purnomo. Serang: PT Sada Kurnia Pustaka.
- Sartika, E.M. *et al.* (2022) ‘Deteksi Gerakan Tangan menggunakan Support Vector Machine pada Dumbbell Berbasis Raspberry Pi Zero’, *ELKOMIKA: Jurnal Teknik Energi Elektrik, Teknik Telekomunikasi, & Teknik Elektronika*, 10(1), p. 105. Available at: <https://doi.org/10.26760/elkomika.v10i1.105>.
- Sim, K.S. dkk. (2024) “Real-Time Digital Assistance for Exercise: Exercise Tracking System with MediaPipe Angle Directive Rules,” *International Journal on Informatics Visualization*, 8(4), hlm. 2380–2387. Tersedia pada: <https://doi.org/10.62527/joiv.8.4.2993>.
- Song, Y. dkk. (2022) “Deep learning-based automatic segmentation of images in cardiac radiography: A promising challenge,” *Computer Methods and Programs in Biomedicine*, 220. Tersedia pada: <https://doi.org/10.1016/j.cmpb.2022.106821>.
- Szeliski, R. (2022) *Computer Vision: Algorithms and Applications, 2nd Edition*. Berlin: Springer. Tersedia pada: <https://www.wiley.com/en-in/Machine+Vision+Algorithms+and+Applications%2C+2nd+Edition-p-9783527413652>.
- Ultralytics (2026) *Ultralytics LinkedIn Profile*, LinkedIn. Tersedia pada: <https://www.linkedin.com/company/ultralytics/> (Diakses: 8 Mei 2026).
- Walker, K., Phillips, N. dan Sheeran, L. (2025) “Exploring the use of digital technology for injury prevention and self-management among recreational runners,” *Physical Therapy in Sport*, 71, hlm. 85–91. Tersedia pada: <https://doi.org/10.1016/j.ptsp.2024.12.004>.
- Walz, W. (2023) *Machine Learning for Brain Disorders Series Editor*. Disunting oleh O. Colliot. New York: Humana Press.
- Wang, C. dan Yan, J. (2023) “A Comprehensive Survey of RGB-Based and Skeleton-Based Human Action Recognition,” *IEEE Access*, 11, hlm. 53898. Tersedia pada: <https://doi.org/10.1109/ACCESS.2023.3282311>.
- World Health Organization (2025) *Obesity and overweight*. Tersedia pada: <https://www.who.int/news-room/fact-sheets/detail/obesity-and-overweight#:~:text=Worldwide adult obesity has more,16%25 were living with obesity> (Diakses: 6 September 2025).
- Yu, Q. *et al.* (2021) ‘Deep Learning-Enabled Multitask System for Exercise Recognition and Counting’, *Multimodal Technologies and Interaction*, 5(9). Available at: <https://doi.org/10.3390/mti5090055>.
- Zheng, C. dkk. (2023) “Deep Learning-based Human Pose Estimation: A Survey,” *ACM Computing Surveys*, 56(1), hlm. 1–37. Tersedia pada: <https://doi.org/10.1145/3603618>.

Zhou, T. dkk. (2025) “Digital technology integration in home-based exercise: a systematic review of research evolution, applications, and impact mechanisms,” *BMC Public Health*, 25, hlm. 3528. Tersedia pada: <https://doi.org/10.1186/s12889-025-24679-9>.