

DAFTAR PUSTAKA

- Abboud, A. W., Guillen, D. P., & Christensen, B. A. (2022). Prediction of Melter Cold-Cap Topology from Plenum Temperatures with Computational Fluid Dynamics and Machine learning. *International Journal of Ceramic Engineering and Science*, 4(4), 257–269. <https://doi.org/10.1002/ces2.10134>
- Ageishi, N., Tomohide, F., & Ben Abdallah, A. (2021). Real-time Hand-Gestur Recognition Based on Deep Neural Network. *SHS Web of Conferences*, 102, 04009. <https://doi.org/10.1051/shsconf/202110204009>
- Ahwani, D. K., Budiman, S. N., & Rahmat, M. F. (2024). Penerapan Mediapipe dalam Pengenalan Bisindo Berbasis Deep Learning dan Computer Vision. *INNOVATIVE: Journal Of Social Science Research*, 4(5), 3608–3628.
- Amartama, S. N., Hidayah, A. N., Sari, P. K., & Ramadhani, R. A. (2024). Implementasi Convolutional Neural Network (CNN) dalam Pengenalan Pola Penulisan Tangan. *STAINS (Seminar Nasional Teknologi & Sains)*, 3(1). <https://doi.org/https://doi.org/10.29407/stains.v3i1.4155>
- Bakti, I., Firdaus, M., & Artikel, S. (2023). Arsitektur Convolutional Neural Network InceptionResNet-V2 Untuk Pengelompokan Pneumonia Chest X-Ray. *Daerah Khusus Ibukota Jakarta*, 12530. <https://doi.org/10.58290/jukomtek>
- Cahyanto, T. A., Wahjuni, S., Sukoco, H., Rahmawan, H., & Neyman, S. N. (2022). Intelligent Ubiquitous Technology as a Precision Agri-Food Framework: a Proposed Framework. *IOP Conference Series: Earth and Environmental Science*, 1041(1), 012022. <https://doi.org/10.1088/1755-1315/1041/1/012022>
- Chen, H. C., Chien, T. W., Chen, L., Yeh, Y. T., Ma, S. C., & Lee, H. F. (2022). An App for Predicting Nurse Intention to Quit the Job Using Artificial Neural Networks (ANNs) in Microsoft Excel. Dalam *Medicine (United States)* (Vol. 101, Nomor 11). Lippincott Williams and Wilkins. <https://doi.org/10.1097/MD.00000000000028915>
- Dhawan, K., & Agrawal, U. (2023). Training and Testing a CNN-Based Engine for Brain MRI Scan Classification and Segmentation. *medRxiv*. <https://doi.org/10.1101/2023.07.03.23292122>

- Divanny, S. R., Nugraha, Z., Ghaffar, M. I., A, M. R. D., Wardana, S. D. S., & Priambodo, A. S. (2024). Penerapan OpenCV dan Fuzzy Logic Controller untuk Line Follower Berbasis Kamera pada Simulasi Robot E-Puck di Webots. *Jurnal Informatika dan Teknik Elektro Terapan*, 12(3). <https://doi.org/10.23960/jitet.v12i3.4718>
- Ellyanti, Riswari, L. A., & Santoso. (2022). Meningkatkan Kemampuan Berhitung Menggunakan Metode Jarimatika Melalui Bimbingan Belajar. *Journal of Primary and Children's Education*, 5(2), 1–10.
- Fawwaz, M. A. A., Kurniawan Nur Ramadhani, S. T. , M. T., & Febryanti Sthevanie, S. T. , M. T. (2020). Klasifikasi Ras pada Kucing menggunakan Algoritma Convolutional Neural Network(CNN). *Jurnal Tugas Akhir Fakultas Informatika*, 8(1), 1–16.
- Gopal, S. V. V. D. V., Kumar, S. S., Dora, M. S., Imran, M., & Chandu, S. (2025). Hand Gestur Detection for Sign Language Using CNN and Mediapipe. *International Journal of Creative Research Thoughts (IJRCT)*, 13(4), 1–7.
- Guo, L. (2022). SAR Image Classification Based on Multi-Feature Fusion Decision Convolutional Neural Network. Dalam *IET Image Processing* (Vol. 16, Nomor 1, hlm. 1–10). John Wiley and Sons Inc. <https://doi.org/10.1049/ipr2.12323>
- Hernandez, P. D., Ramirez, J. A., & Soto, M. A. (2022). Deep-Learning-Based Earthquake Detection for Fiber-Optic Distributed Acoustic Sensing. *Journal of Lightwave Technology*, 40(8), 2639–2650. <https://doi.org/10.1109/JLT.2021.3138724>
- Huse, S., Makode, R., Wankhade, T., & Nachane, T. (2025). Real-Time ISL Recognition Using CNN and MediaPipe. *International Journal for Multidisciplinary Research (IJFMR)*, 7(1), 1–7. www.ijfmr.com
- Kilichev, D., Turimov, D., & Kim, W. (2024). Next-Generation Intrusion Detection for IoT EVCS: Integrating CNN, LSTM, and GRU Models. *Mathematics*, 12(4), 1–27. <https://doi.org/10.3390/math12040571>
- Kumar, R., & Bajpai, A. (2024). *Mediapipe and CNNs for Real-Time ASL Gestur Recognition*. 1–6.
- Kumar, R., Singh, S. K., Bajpai, A., & Sinha, A. (2024). *Mediapipe and CNNs for Real-Time ASL Gestur Recognition*. <https://doi.org/https://doi.org/10.48550/arXiv.2305.05296>
- Mienye, I. D., Swart, T. G., & Obaido, G. (2024). Recurrent Neural Networks: A Comprehensive Review of Architectures, Variants, and

- Applications. Dalam *Information (Switzerland)* (Vol. 15, Nomor 9). Multidisciplinary Digital Publishing Institute (MDPI). <https://doi.org/10.3390/info15090517>
- Mohsen, S. (2023). Recognition of Human Activity Using GRU Deep Learning Algorithm. *Multimedia Tools and Applications*, 82(30), 47733–47749. <https://doi.org/10.1007/s11042-023-15571-y>
- Mukhtar, M., Oluwasanmi, A., Yimen, N., Quixin, Z., Ukwuoma, C. C., Ezurike, B., & Bamisile, O. (2022). Development and Comparison of Two Novel Hybrid Neural Network Models for Hourly Solar Radiation Prediction. *Applied Sciences (Switzerland)*, 12(3). <https://doi.org/10.3390/app12031435>
- Naoto Ageishi, F. T. & A. B. A. (2021). Real-time Hand-Gestur Recognition based on Deep Neural Network. *SHS Web of Conferences*, 102, 04009. <https://doi.org/10.1051/shsconf/202110204009>
- Narayana, Mr. Ch. L., & Praveena, M. V. (2023). Real-Time Hand Gestur Recognition System Using CNN. *International Journal of Current Science*, 13(3), 1–7. www.ijcspub.org
- Naufal, M. F., Huda, S., Budilaksono, A., Aria Yustisia, W., Agustina Arius, A., Alya Miranti, F., & Arghya Tito Prayoga, F. (2021). Klasifikasi Citra Game Batu Kertas Gunting Menggunakan Convolutional Neural Network Image Classification of Rock Paper Scissor Game Using Convolutional Neural Network. *Techno.Com*, 20(1), 166–174. <https://doi.org/https://doi.org/10.33633/tc.v20i1.4273>
- Nautica, M. rifki P. (2022). *Hand Gestur Detection Sebagai Alat Bantu Ajar Berhitung Menggunakan MediaPipe dan Convolutional Neural Network secara Realtime*.
- Neethu, P. S., Suguna, R., & Sathish, D. (2020, Oktober 1). An Efficient Method for Human Hand Gestur Detection and Recognition Using Deep Learning Convolutional Neural Networks. *Soft Computing*, 24(20), 15239–15248. <https://doi.org/10.1007/s00500-020-04860-5>
- Oruh, J., Viriri, S., & Adegun, A. (2022). Long Short-Term Memory Recurrent Neural Network for Automatic Speech Recognition. *IEEE Access*, 10, 1–11. <https://doi.org/10.1109/ACCESS.2022.3159339>
- Pratikno, H., Pratama, M. R., Triwidyastuti, Y., & Musayyanah. (2023). Pengenalan Gestur Jari Tangan Sebagai Media Pembelajaran Berhitung Bagi PAUD Berbasis Visi Komputer dan Deep Learning.

- Journal of Computer Electronic and Telecommunication*, 4(1).
<https://doi.org/10.52435/complete.v4i1.355>
- Prof. C.D. Sawarkar, Vaidya, Mr. V., Sharma Mr. Vansh, Sheikh, Mr. S., Neware, Mr. A., & Chaudhari, Mr. P. (2024). AI Based Real Time Hand Gestur Recognition System. *International Research Journal of Modernization in Engineering Technology and Science*, 6.
<https://doi.org/10.56726/IRJMETS48782>
- Raju, G., Sushmitha, K., Priyanka, M., Leela, S., Chowdary, V. V., & Yashwantha, M. (2025). Real Time Hand Gestur Recognition Using CNN. *Global Journal of Engineering Innovations & Interdisciplinary Research GJEIIR*, 5(2), 1–5.
- Reddy, V. K., Prasanth, V. D., Krishna, R. S. R., Lekha, N. S., & N.M, J. (2024). Hand Gestur Recognition Using Convolutional Neural Networks. *Original Research Paper International Journal of Intelligent Systems and Applications in Engineering IJISAE*, 12(3), 1–5. www.ijisae.org
- Rheiner, J., Kerger, D., & Drüppel, M. (2025). From Pixels to Letters: A high-Accuracy CPU-Real-Time American Sign Language Detection Pipeline. *Machine Learning with Applications*, 20, 100650.
<https://doi.org/10.1016/j.mlwa.2025.100650>
- Sahila, D. R., Usman, A. T., & Holis, A. (2025). Penerapan Media Tulang Napier Berbantuan Metode Jarimatika dalam Meningkatkan Kemampuan Operasi Hitung Perkalian. *Jurnal Cendekia : Jurnal Pendidikan Matematika*, 9(1), 409–421.
<https://doi.org/10.31004/cendekia.v9i1.3908>
- Singh, R. K., Mishra, A. K., & Mishra, R. (2022). Hand Gestur Identification for Improving Accuracy Using Convolutional Neural Network(CNN). *the Scientific Temper*, 13(2), 336–344.
<https://doi.org/10.58414/scientifictemper.13.2.2022.336-344>
- Stella, M. M., Mary, I., Anand, M. S., Manikandan, A. S., & Senthamiluthu, M. (2024). Hand Gestur Recognition Using Mediapipe and Opencv. *International Journal of Computer Applications (IJCRT)*, 12(2), 2320–2882. www.ijcrt.org
- Supiyandi, Hidayah, A. F., Budie, L., Berutu, N., & Fahraini, F. (2024). Pengenalan Gambar Dasar Menggunakan Python dan OpenCV. *Jurnal Sistem Informasi dan Ilmu Komputer*, 2(4), 52–61.
<https://doi.org/10.59581/jusiik-widyakarya.v2i4.4200>

- Suryaperdana Agoes, A. (2021). *Applying Hand Gestur Recognition for User Guide Application Using MediaPipe*.
- Susim, T., Darujati, C., & Artikel, I. (2021). Pengolahan Citra Untuk Pengenalan Wajah (Face Recognition) Menggunakan OpenCV. *Jurnal Syntax Admiration*, 2(3).
- Tahir, S. R., & Halim, S. N. H. (2021). Pelatihan Berhitung Cepat dengan Jari (Jarimatika) pada Siswa Kelas VII UPT SMP Mumahmmadiyah 1 Makassar. *J. A. I: Jurnal Abdimas Indonesia*, 2797–2887. <https://dmi-journals.org/jai/>
- Verma, A. R., Singh, G., Meghwal, K., Ramji, B., & Dadheech, P. K. (2024). *Enhancing Sign Language Detection through Mediapipe and Convolutional Neural Networks (CNN)*. (July). <http://arxiv.org/abs/2406.03729>
- Wameed, M., Alkamachi, A. M., & Erçelebi, E. (2023). Tracked Robot Control with Hand Gestur Based on MediaPipe. *Al-Khwarizmi Engineering Journal*, 19(3), 56–71. <https://doi.org/10.22153/kej.2023.04.004>
- Yan, Y. H., Chien, T. W., Yeh, Y. T., Chou, W., & Hsing, S. C. (2020). An App for Classifying Personal Mental Illness at Workplace Using Fit Statistics and Convolutional Neural Networks: Survey-Based Quantitative Study. *JMIR mHealth and uHealth*, 8(7). <https://doi.org/10.2196/17857>