

DAFTAR PUSTAKA

- [1] A. M. R. B. Makkaraka, Akbar Iskandar, and Wang Yang, "Design of Web-Based Student Academic Information System," *Ceddi J. Educ.*, vol. 3, no. 2, pp. 9–15, Dec. 2024, doi: 10.56134/cje.v3i2.102.
- [2] Shruthi, P. Sangeetha, A. Kodte, and V. V. K. Tejaswini, "Automated Attendance Sentinel," *Int. J. Res. Technol. Innov. IJRTI*, vol. 9, no. 4, 2024.
- [3] G. Marcel and H. Flaubert, "A Development of an Online Student Attendance Management Information System: Case Study 'University of Tourism, Technology, and Business Studies,'" *Int J Sci Res Comput Sci Eng*, vol. 10, no. 1, pp. 32–48, 2022.
- [4] M. T. H. Fuad *et al.*, "Recent Advances in Deep Learning Techniques for Face Recognition," *IEEE Access*, vol. 9, pp. 99112–99142, 2021, doi: 10.1109/ACCESS.2021.3096136.
- [5] R. D. Djohari, H. R. Ngemba, S. Hendra, D. S. Angraeni, N. T. Lapatta, and D. W. Nugraha, "Employee Attendance System with Facial Recognition Technology Using a Single Shot Detector (SSD) Algorithm," *J. Inform. Telecommun. Eng.*, vol. 7, no. 2, pp. 424–434, Jan. 2024, doi: 10.31289/jite.v7i2.10869.
- [6] G. P. Warman and G. P. Kusuma, "Face recognition for smart attendance system using deep learning," *Commun. Math. Biol. Neurosci.*, no. 19, pp. 1–17, 2023, doi: 10.28919/cmbn/7872.
- [7] I. Sahputra and M. Fikry, "A Robust Approach to Student Attendance Using Web-Based Facial Recognition," *Proc 2nd Int Conf Multidiscip Eng ICOMDEN*, vol. 2, 2024.
- [8] E. Febiyani, Z. Hanni Pradana, and I. Permatasari, "Evaluasi Arsitektur Convolutional Neural Network MobileNetV1 pada Sistem Face Recognition untuk Monitoring Presensi," *J. SINTA Sist. Inf. Dan Teknol. Komputasi*, vol. 2, no. 3, Jul. 2025, doi: 10.61124/sinta.v2i3.83.
- [9] R. Lionnie, M. M. Huda, and M. Alaydrus, "Illumination Invariant Face Recognition," *J. Telekomun. Dan Komput.*, vol. 10, no. 3, p. 129, Dec. 2020, doi: 10.22441/incomtech.v10i3.8466.
- [10] R. I. Bendjillali, M. Beladgham, K. Merit, and A. Taleb-Ahmed, "Illumination-robust face recognition based on deep convolutional neural networks architectures," *Indones. J. Electr. Eng. Comput. Sci.*, vol. 18, no. 2, p. 1015, May 2020, doi: 10.11591/ijeecs.v18.i2.pp1015-1027.
- [11] I. Majid Mohammed and N. Ashidi Mat Isa, "Contrast Limited Adaptive Local Histogram Equalization Method for Poor Contrast Image Enhancement," *IEEE Access*, vol. 13, pp. 62600–62632, 2025, doi: 10.1109/ACCESS.2025.3558506.
- [12] S. Supriyanto, M. Harika, M. S. Ramadiani, and D. R. Ramdania, "Multiscale Retinex Application to Analyze Face Recognition," *J. Online Inform.*, vol. 5, no. 2, pp. 217–226, Dec. 2020, doi: 10.15575/join.v5i2.668.
- [13] D. Kurnia, A. A. Rahmansyah, T. S. Manik, and S. Lumbantoruan, "Aplikasi Pengolahan Citra Dengan Metode MultiScale Retinex Untuk Perbaikan Citra

- 2 Dimensi,” *J. Rekayasa Teknol. Proses Dan Sains Kim. REPROKIMIA*, vol. 2, 2022.
- [14] Muhammad Indra Ardiawan and Gede Putra Kusuma Negarara, “Comparative Analysis of FaceNet, VGGFace, and GhostFaceNets Face Recognition Algorithms For Potential Criminal Suspect Identification,” *J. Appl. Artif. Intell.*, vol. 5, no. 2, pp. 34–49, Sep. 2024, doi: 10.48185/jaai.v5i2.1237.
- [15] A. B. Prastyo and A. Setyanto, “Analysis of FaceNet and VGG16 for Blind Face Recognition with MTCNN and HaarCascade Detection Methods,” *G-Tech J. Teknol. Terap.*, vol. 9, no. 2, pp. 570–577, Apr. 2025, doi: 10.70609/gtech.v9i2.6573.
- [16] A. S. Mohammad, T. G. Jarullah, M. T. S. Al-Kaltakchi, J. Alshehabi Al-Ani, and S. Dey, “IoT-MFaceNet: Internet-of-Things-Based Face Recognition Using MobileNetV2 and FaceNet Deep-Learning Implementations on a Raspberry Pi-400,” *J. Low Power Electron. Appl.*, vol. 14, no. 3, p. 46, Sep. 2024, doi: 10.3390/jlpea14030046.
- [17] Computer Engineering Department Madhuben and Bhanubhai Patel Institute of Technology, CVM University, Vallabh Vidyanagar, Gujarat, India and A. Vadwala, “A Comprehensive Review Of Digitalized Attendance Systems For Various Institutions,” *Int. J. Eng. Appl. Sci. Technol.*, vol. 09, no. 03, pp. 119–123, Aug. 2024, doi: 10.33564/IJEAST.2024.v09i03.011.
- [18] A. S. M. Arul Selvan and V. Vardhini, “Impact of Digital Attendance System on Student Performance and Discipline,” *Int. Adv. Res. J. Sci. Eng. Technol.*, vol. 12, no. 5, 2025.
- [19] Bachelor of Science in Information Technology, Isabela State University Angadanan Campus, Centro 03, Angadanan, Isabela, Philippines. and R. B. Rivera, “Enhanced Attendance Monitoring System using Biometric Fingerprint Recognition,” *Int. J. Recent Technol. Eng. IJRTE*, vol. 9, no. 5, pp. 1–4, Jan. 2021, doi: 10.35940/ijrte.E5070.019521.
- [20] N. Rai, C. Tikhe, and P. Dongare, “Review on RFID based Student Monitoring and Attendance System,” *Int. J. Innov. Res. Sci. Eng. Technol.*, vol. 9, no. 4, 2020.
- [21] A. R. Pratama, M. Nasrudin, A. F. Adziima, S. Shella, and M. Wara, “Optimalisasi Deteksi Wajah Real-Time Menggunakan HAAR Cascade Classifier berbasis OpenCV,” vol. 07, no. 1, 2025.
- [22] M. R. M. Ariefwan and K. M. Hindrayani, “InceptionV3, ResNet50, ResNet18 and MobileNetV2 Performance Comparison on Face Recognition Classification,” no. 1, 2023.
- [23] J. Patel, S. Gandhi, V. Katheriya, P. Pataliya, and A. Majumdar, “Enhancing Classroom Attendance Systems with Face Recognition through CCTV using Deep Learning,” *Procedia Comput. Sci.*, vol. 258, pp. 3031–3041, 2025, doi: 10.1016/j.procs.2025.04.561.
- [24] V. The and Y. P. Santosa, “Implementation Of Face Recognition Attendance System For Pt. Sumber Kurnia Alam With Mtcnn And Facenet Algorithm,” *Proxies J. Inform.*, vol. 6, no. 2, pp. 184–191, Aug. 2024, doi: 10.24167/proxies.v6i2.12461.

- [25] P. B. Jha, A. Basnet, B. Pokhrel, B. Pokhrel, G. K. Thakur, and S. Chhetri, "An Automated Attendance System Using Facial Detection and Recognition Technology," *Apex J. Bus. Manag.*, vol. 1, no. 1, pp. 103–120, 2023, doi: 10.61274/apxc.2023.v01i01.008.
- [26] B. Thakur and R. Chakre, "Hybrid Deep Learning based Smart Attendance System with Robust Anti Spoofing Mechanism," *Commun. Appl. Nonlinear Anal.*, vol. 32, no. 10, pp. 3113–3126, 2025, doi: <https://doi.org/10.52783/cana.v32.5931>.
- [27] R. B. Hadiprakoso, "Face Anti-Spoofing Method with Blinking Eye and HSV Texture Analysis," *IOP Conf. Ser. Mater. Sci. Eng.*, vol. 1007, no. 1, p. 012034, Dec. 2020, doi: 10.1088/1757-899X/1007/1/012034.
- [28] E. Syahputra, I. Nursukmi, S. Putra, B. S. Sani, and R. F. Wijaya, "Eye Aspect Ratio Adjustment Detection For Strong Blinking Sleepiness Based On Facial Landmarks With Eye-Blink Dataset," *ZERO J. Sains Mat. Dan Terap.*, vol. 6, no. 2, p. 147, Feb. 2023, doi: 10.30829/zero.v6i2.14751.
- [29] R. P. H. Sejati and R. Mardhiyyah, "Deteksi Wajah Berbasis Facial Landmark Menggunakan OpenCV Dan Dlib," *J. Teknol. Inf.*, vol. 5, no. 2, pp. 144–148, Dec. 2021, doi: 10.36294/jurti.v5i2.2220.
- [30] C. Dewi, R.-C. Chen, C.-W. Chang, S.-H. Wu, X. Jiang, and H. Yu, "Eye Aspect Ratio for Real-Time Drowsiness Detection to Improve Driver Safety," *Electronics*, vol. 11, no. 19, p. 3183, Oct. 2022, doi: 10.3390/electronics11193183.
- [31] G. S. S. Chari, "Real-time driver drowsiness detection based on integrative approach of deep learning and machine learning model," *Indones. J. Electr. Eng. Comput. Sci.*, vol. 39, no. 1, pp. 1–11, Jul. 2025, doi: 10.11591/ijeecs.v39.i1.pp592-602.
- [32] E. I. H. Ujianto, "Face Detection Based on Anti-Spoofing with FaceNet Method for Filtering Contract Cheating in Online Exam," *J. Appl. Data Sci.*, vol. 7, no. 1, pp. 815–832, Jan. 2026, doi: 10.47738/jads.v7i1.1167.
- [33] R. K. Mishra, G. Y. S. Reddy, and H. Pathak, "The Understanding of Deep Learning: A Comprehensive Review," *Math. Probl. Eng.*, vol. 2021, pp. 1–15, Apr. 2021, doi: 10.1155/2021/5548884.
- [34] P. Purwono, A. Ma'arif, W. Rahmaniar, H. I. K. Fathurrahman, A. Z. K. Frisky, and Q. M. U. Haq, "Understanding of Convolutional Neural Network (CNN): A Review," *Int. J. Robot. Control Syst.*, vol. 2, no. 4, pp. 739–748, Jan. 2023, doi: 10.31763/ijrcs.v2i4.888.
- [35] D. Sari, Alfian Rizaldy Pratama, Dadet Pramadihanto, and Bayu Sandi Marta, "3D Object Detection Based on Point Cloud Data," *Inf. J. Ilm. Bid. Teknol. Inf. Dan Komun.*, vol. 7, no. 1, pp. 59–66, Jun. 2022, doi: 10.25139/inform.v7i1.4570.
- [36] I. P. Pratama and N. K. Ningrum, "Face Recognition Using MTCNN Face Detection, ResNetV1 Feature Embeddings, and SVM Classification," *Journal of Applied Informatics and Computing (JAIC)*, vol. 9, no. 5, pp. 2049–2058.
- [37] G. S. M. Diyasa, A. Fauzi, M. Idhom, and A. Setiawan, "Multi-face Recognition for the Detection of Prisoners in Jail using a Modified Cascade

- Classifier and CNN,” *J. Phys. Conf. Ser.*, vol. 1844, no. 1, p. 012005, Mar. 2021, doi: 10.1088/1742-6596/1844/1/012005.
- [38] A. N. Imam Muttaqin, A. Luthfiarta, A. Nugraha, and P. M. Salsabila, “Single-Image Face Recognition For Student Identification Using Facenet512 And Yolov8 In Academic Environtment With Limited Dataset,” *J. Tek. Inform. Jutif*, vol. 6, no. 5, pp. 3018–3032, Oct. 2025, doi: 10.52436/1.jutif.2025.6.5.3908.
- [39] M. N. Hossain, M. M. Rahman, and D. Ramasamy, “Artificial Intelligence-Driven Vehicle Fault Diagnosis to Revolutionize Automotive Maintenance: A Review,” *Comput. Model. Eng. Sci.*, vol. 141, no. 2, pp. 951–996, 2024, doi: 10.32604/cmescs.2024.056022.
- [40] A. B. Petro, C. Sbert, and J.-M. Morel, “Multiscale Retinex,” *Image Process. Line*, vol. 4, pp. 71–88, Apr. 2014, doi: 10.5201/ipol.2014.107.
- [41] A. R. Hermanto, A. Aziz, and S. Sudioanto, “Perbandingan Arsitektur MobileNetV2 dan RestNet50 untuk Klasifikasi Jenis Buah Kurma,” *J. Sist. Dan Teknol. Inf. JUSTIN*, vol. 12, no. 4, pp. 630–637, 2024.
- [42] M. G. Somoal and A. R. Dzikrillah, “Komparasi MobileNETV2 dengan Kustomisasi Transfer Learning dan Hyperparameter untuk Identifikasi Tumor Otak,” *J. Teknol. Inf. Dan Ilmu Komput.*, vol. 12, no. 1, pp. 229–240, Feb. 2025, doi: 10.25126/jtiik.2025129582.
- [43] H. Khairiyah and M. A. Masril, “Implementasi Teknologi Computer Vision Pada Alat Penghitung Botol Air Minum Kemasan Di Industri Menggunakan Metode HSL,” *J. Quacom*, vol. 1, no. 2, pp. 11–15, 2023.
- [44] D. A. Budi, “Perancangan Sistem Login pada Aplikasi Berbasis GUI Menggunakan Qtdesigner Python,” *J. SIMADA Sist. Inf. Dan Manaj. Basis Data*, vol. 4, no. 2, pp. 92–100, Nov. 2021, doi: 10.30873/simada.v4i2.2961.
- [45] S. I. Attaqwa, E. Y. Puspaningrum, and W. S. J. Saputra, “Implementasi Contrast Limited Adaptive Histogram Equalization Dalam Pengolahan Citra Pada Algoritma Generative Adversarial Network,” *J. Inform. Dan Tek. Elektro Terap.*, vol. 12, no. 3S1, Oct. 2024, doi: 10.23960/jitet.v12i3S1.5316.
- [46] P. Musa, F. A. Rafi, and M. Lamsani, “A Review: Contrast-Limited Adaptive Histogram Equalization (CLAHE) methods to help the application of face recognition,” in *2018 Third International Conference on Informatics and Computing (ICIC)*, Palembang, Indonesia: IEEE, Oct. 2018, pp. 1–6. doi: 10.1109/IAC.2018.8780492.
- [47] M. Braik, M. A. Al-Betar, M. A. Mahdi, M. Al-Shalabi, S. Ahamad, and S. A. Saad, “Enhancement of satellite images based on CLAHE and augmented elk herd optimizer,” *Artif. Intell. Rev.*, vol. 58, no. 2, p. 38, Dec. 2024, doi: 10.1007/s10462-024-11022-8.