

DAFTAR PUSTAKA

- [1] S. Alanazi and S. Asif, “Understanding Deepfakes : A Comprehensive Analysis of Creation , Generation , and Detection,” vol. 72, pp. 216–224, 2023.
- [2] Tencent, “Tencent Artificial Intelligence White Paper,” Sina Technology.
- [3] A. Mccosker, “Making sense of deepfakes : Socializing AI and building data literacy on GitHub and YouTube,” no. December 2022, 2024, doi: 10.1177/14614448221093943.
- [4] T. Daysy, T. Dissemination, M. T. Deepfakes, S. Media, S. Polarization, and C. Education, “The Dissemination of Misinformation Through Deepfakes on Social Media and its Effects on Political and Social Polarization,” 2023.
- [5] S. Karnouskos, “Artificial Intelligence in Digital Media: The Era of Deepfakes,” *IEEE Trans. Technol. Soc.*, vol. 1, no. 3, pp. 138–147, 2021, doi: 10.1109/tts.2021.3001312.
- [6] J. Brookman, “The Good , the Bad , and the Ugly : AI-Generated Deepfakes in 2025 On behalf of Consumer Reports,” 2025.
- [7] M. Solberg, “Deepfake Incident Report : Mapping Deepfake Incidents Executive Summary,” *J.P. Morgan*, 2025.
- [8] D. Fallis, “The Epistemic Threat of Deepfakes,” pp. 623–643, 2021.
- [9] F. E. Muhammad and B. Harefa, “Pengaturan Tindak Pidana Bagi Pelaku Penipuan Phisning Berbasis Web tindakan dan perbuatan hukum yang nyata . Secara yuridis dalam hal ruang cyber,” vol. 6, no. 1, pp. 226–241, 2023.
- [10] R. J. White, “IN THE APPELLATE COURT OF ILLINOIS SECOND DISTRICT,” *THE PEOPLE OF THE STATE OF ILLINOIS*, vol. 23, no. 2, pp. 1–47, 2021.
- [11] L. P. A. Amaranggana and N. Dzulfaroh, “Krisis Pornografi Deepfake di Korea Selatan, Peringatan Dini untuk Indonesia,” 2024.
- [12] M. Boháček and H. Farid, “PROTECTING PRESIDENT ZELENSKYY AGAINST DEEP FAKES,” *Univ. Calif.*, pp. 1–8, 2022.
- [13] VIDA, “Penipuan Deepfake Indonesia Melonjak 1550%,” *VIDA*, 2024.

- [14] K. Fadilah, "Babak Baru Perkara Deepfake Catut Prabowo," 2025.
- [15] S. Hadi, "Oknum Mahasiswa Pelaku Deepfake Dikeluarkan dari UNUD," Inventor Id.
- [16] M. C. Sumampow and T. Felisiani, "Pemilu 2029 Terancam Deepfake dan Isu SARA, Mafindo: Ini Skenario Terburuk," *Detik.com*, 2025.
- [17] N. Patria, "Deepfake naik 55 kemkomdigi minta platform global sediakan fitur cek konten ai," *Komdigi*, 2025.
- [18] M. S. Rana, M. N. Nobil, B. Murali, and A. H. Sung, "Deepfake Detection: A Systematic Literature Review," *IEEE Access*, vol. 10, pp. 25494–25513, 2022, doi: 10.1109/ACCESS.2022.3154404.
- [19] M. Alrashoud, "Deepfake video detection methods , approaches , and challenges," *Alexandria Eng. J.*, vol. 125, no. March, pp. 265–277, 2025, doi: 10.1016/j.aej.2025.04.007.
- [20] O. Edward and S. Toochukwu, "DEEPFAKE DETECTION USING CONVOLUTION NEURAL NETWORK," vol. 8, no. 1, pp. 194–201, 2023.
- [21] D. Eddy Muntina, N. M. S. Iswari, and I. P. R. A. Arimbawa, "Deep-fake Image Detection Using Convolutional Neural Network with EfficientNet Architecture," vol. 9, no. 4, pp. 1829–1838, 2025.
- [22] R. Shaktivel, R. Mishra, K. Nadar, R. Pasi, A. Khan, and A. Professor, "Deepfake Detection using Machine Learning," *Int. J. Innov. Res. Sci. Eng. Technol. Diabet. Retin.*, vol. 14, no. 7, 2025, doi: 10.15680/IJIRSET.2025.1404583.
- [23] dkk Dzulfian Syafrian, "No 主観的健康感を中心とした在宅高齢者における 健康関連指標に関する共分散構造分析Title," *Sustain.*, vol. 11, no. 1, pp. 1–14, 2025, [Online]. Available: http://scioteca.caf.com/bitstream/handle/123456789/1091/RED2017-Eng-8ene.pdf?sequence=12&isAllowed=y%0Ahttp://dx.doi.org/10.1016/j.regsciurbeco.2008.06.005%0Ahttps://www.researchgate.net/publication/305320484_SISTEM_PEMBETUNGAN_TERPUSAT_STRATEGI_MELESTARI
- [24] M. Tan and Q. V. Le, "EfficientNet: Rethinking model scaling for convolutional neural networks," *36th Int. Conf. Mach. Learn. ICML 2019*,

- vol. 2019-June, pp. 10691–10700, 2019.
- [25] F. Juefei-xu, R. Wang, Y. Huang, Q. Guo, and Y. Liu, “Countering Malicious DeepFakes: Survey, Battleground, and Horizon,” 2021.
- [26] A. Rossler, D. Cozzolino, L. Verdoliva, C. Riess, J. Thies, and M. Niessner, “FaceForensics++: Learning to detect manipulated facial images,” *Proc. IEEE Int. Conf. Comput. Vis.*, no. October, pp. 1–11, 2019, doi: 10.1109/ICCV.2019.00009.
- [27] R. Adityatama and A. T. Putra, “Image classification of Human Face Shapes Using Convolutional Neural Network Xception Architecture with Transfer Learning,” *Recursive J. Informatics*, vol. 1, no. 2, pp. 102–109, 2023, doi: 10.15294/rji.v1i2.70774.
- [28] A. Iqbal, M. A. Jaffar, and R. Jahangir, “Enhancing Brain Tumour Multi-Classification Using Efficient-Net B0-Based Intelligent Diagnosis for Internet of Medical Things (IoMT) Applications,” *Inf.*, vol. 15, no. 8, 2024, doi: 10.3390/info15080489.
- [29] G. Harshit, M. C. Reddy, and Y. V. S. Sarath, “Deepfake Detection using Efficientnet-B0 and GRU,” vol. 14, no. 04, 2025.
- [30] H. Wang, “Effectiveness and Optimization of Bidirectional Long Short-Term Memory (Bilstm) Based Fast Detection of Deep Fake Face Videos for Real-Time Applications,” *PeerJ Comput. Sci.*, vol. 11, pp. 1–25, 2025, doi: 10.7717/peerj-cs.2867.
- [31] S. Larsson, “Everyday encounters with deepfakes : young people ’ s media and information literacy practices with AI-generated media,” no. May, 2025, doi: 10.1108/JD-01-2025-0007.
- [32] C. T. Noerman and A. L. Ibrahim, “Kriminalisasi Deepfake Di Indonesia Sebagai Bentuk Perlindungan Negara,” 2024.
- [33] Admin, “A Definitive Guide to Deepfake Social Media: Evolution, Creation & Detection,” FACIA.
- [34] R. Tahir, F. Ahmed, M. A. Zaffar, and M. F. Zaffar, “Seeing is Believing : Exploring Perceptual Differences in DeepFake Videos,” 2021.
- [35] S. Kiranyaz, O. C. Devecioglu, T. Ince, J. Malik, M. Chowdhury, and T.

Hamid, "Blind ECG Restoration by Operational".

- [36] A. M. Almars, "Deepfakes Detection Techniques Using Deep Learning : A Survey," pp. 20–35, 2021, doi: 10.4236/jcc.2021.95003.
- [37] G. Developers, "Ringkasan Struktur GANs," Google.
- [38] M. Westerlund, "The Emergence of Deepfake Technology : A Review," 2021.
- [39] A. O. J. Kwok and S. G. M. Koh, "Current Issues in Tourism Deepfake : a social construction of technology perspective," *Curr. Issues Tour.*, vol. 0, no. 0, pp. 1–5, 2023, doi: 10.1080/13683500.2023.1738357.
- [40] F. Marra, D. Gragnaniello, D. Cozzolino, and L. Verdoliva, "Detection of GAN-Generated Fake Images over Social Networks Detection of GAN-generated Fake Images over Social Networks," no. April, 2023, doi: 10.1109/MIPR.2023.00084.
- [41] S. Alanazi and S. Asif, "Exploring deepfake technology : creation , consequences and countermeasures," *Human-Intelligent Syst. Integr.*, vol. 6, no. 1, pp. 49–60, 2024, doi: 10.1007/s42454-024-00054-8.
- [42] C. Janiesch and K. Heinrich, "Machine learning and deep learning," pp. 685–695, 2021.
- [43] T. E. Potok *et al.*, "A Study of Complex Deep Learning Networks on Computers," pp. 1–22, 2021.
- [44] T. Yang, X. Yu, N. Ma, Y. Zhang, and H. Li, "Deep representation-based transfer learning for deep neural networks," *Knowledge-Based Syst.*, vol. 253, p. 109526, Oct. 2022, doi: 10.1016/J.KNOSYS.2022.109526.
- [45] A. Hosna, E. Merry, J. Gyalmo, Z. Alom, Z. Aung, and M. A. Azim, "Transfer learning : a friendly introduction," *J. Big Data*, 2022, doi: 10.1186/s40537-022-00652-w.
- [46] T. Cody and P. A. Beling, "A Systems Theory of Transfer Learning," *IEEE Syst. J.*, vol. 17, no. 1, pp. 26–37, 2023, doi: 10.1109/JSYST.2022.3224650.
- [47] A. H. Ali and A. M. Abdulazeez, "Transfer Learning In Machine Learning: A Review Of Methods And Applications," vol. 13, no. 1, pp. 4227–4259, 2024.

- [48] M. Iman, H. R. Arabnia, and K. Rasheed, "A Review of Deep Transfer Learning and Recent Advancements," *Technologies*, vol. 11, no. 2, pp. 1–14, 2023, doi: 10.3390/technologies11020040.
- [49] M. Kaya and S. Hajimirza, "Using a Novel Transfer Learning Method for Designing Thin Film Solar Cells with Enhanced Quantum Efficiencies," *Sci. Rep.*, no. March, pp. 1–10, 2021, doi: 10.1038/s41598-019-41316-9.
- [50] K. Ma, D. Feng, K. Lawson, and W. Tsai, "Transferring Hydrologic Data Across Continents – Leveraging Data-Rich Regions to Improve Hydrologic Prediction in Data-Sparse Regions Water Resources Research," pp. 1–11, 2021.
- [51] I. Isewon, E. Alagbe, and J. Oyelade, "Optimizing machine learning performance for medical imaging analyses in low-resource environments : The prospects of CNN-based Feature Extractors," pp. 1–15, 2025.
- [52] E. E. Citra, D. H. Fudholi, and C. K. Dewa, "Implementasi Arsitektur EfficientNetV2 Untuk Klasifikasi Gambar Makanan Tradisional Indonesia," vol. 7, no. April, pp. 766–777, 2023, doi: 10.30865/mib.v7i2.5881.
- [53] F. Zulfiqar, U. Ijaz Bajwa, and Y. Mehmood, "Multi-class classification of brain tumor types from MR images using EfficientNets," *Biomed. Signal Process. Control*, vol. 84, p. 104777, Jul. 2023, doi: 10.1016/J.BSPC.2023.104777.
- [54] Z. A. Khan *et al.*, "Fine-tuned deep transfer learning: an effective strategy for the accurate chronic kidney disease classification," *PeerJ Comput. Sci.*, vol. 11, pp. 1–35, 2025, doi: 10.7717/peerj-cs.2800.
- [55] A. Davila, J. Colan, and Y. Hasegawa, "Bio-Inspired Fine-Tuning for Selective Transfer Learning in Image Classification," *IEEE Access*, vol. 13, no. June, pp. 129234–129249, 2025, doi: 10.1109/ACCESS.2025.3587524.
- [56] L. Feng *et al.*, "Adaptive multi-source domain collaborative fine-tuning for transfer learning," *PeerJ Comput. Sci.*, vol. 10, 2024, doi: 10.7717/peerj-cs.2107.
- [57] J. Gupta, S. Pathak, and G. Kumar, "Deep Learning (CNN) and Transfer Learning : A Review," 2022, doi: 10.1088/1742-6596/2273/1/012029.

- [58] M. Hussain, J. J. Bird, and D. R. Faria, "A Study on CNN Transfer Learning for Image Classification," pp. 1–12.
- [59] "Convolution - MATLAB & Simulink."
- [60] A. Abbas and M. M. Abdelsamea, "DeTrac : Transfer Learning of Class Decomposed Medical Images in Convolutional Neural Networks," vol. 8, pp. 1–56, 2021, doi: 10.1109/ACCESS.2021.2989273.
- [61] C.-T. YEN and K.-H. LI, "Discussions of Different Deep Transfer Learning Models for Emotion Recognitions," *IEEE Access*, vol. 10, no. September, pp. 102860–102875, 2022, doi: 10.1109/ACCESS.2022.3209813.
- [62] S. Gang, N. Daewon, D. Chung, and J. Lee, "Character Recognition of Components Mounted on Printed Circuit Board Using Deep Learning," 2021.
- [63] V. Hoang and K. Jo, "Practical Analysis on Architecture of EfficientNet," pp. 2–5, 2025.
- [64] A. Open *et al.*, "A novel Chinese herbal medicine classification approach based on EfficientNet A novel Chinese herbal medicine classification approach based on EfficientNet," vol. 2583, 2021, doi: 10.1080/21642583.2021.1901159.
- [65] C. Xi and R. Liu, "Detection of Small Floating Target on Sea Surface Based on Gramian Angular Field and Improved EfficientNet," *Remote Sens.*, vol. 14, no. 17, 2022, doi: 10.3390/rs14174364.
- [66] S. Yuan, "SECNN : Squeeze-and-Excitation Convolutional Neural Network for Sentence Classification".
- [67] M. Patacchiola, J. Bronskill, and R. E. Turner, "Contextual Squeeze-and-Excitation for Efficient Few-Shot Image Classification," no. NeurIPS, 2022.
- [68] "How to Find the Best Pre-Trained Models for Image Classification | ReductStore." Accessed: Nov. 23, 2025. [Online]. Available: <https://www.reduct.store/blog/pre-trained-models-computer-vision>
- [69] H. Janoria, J. Minj, and P. Patre, "Classification of Skin Disease from Skin images using Transfer Learning Technique," *Proc. 4th Int. Conf. Electron. Commun. Aerosp. Technol. ICECA*, vol. 13, no. January, pp. 888–895, 2025,

doi: 10.1109/ICECA49313.2025.9297567.

- [70] S. Yamaguchi, S. Kanai, A. Kumagai, D. Chijiwa, and H. Kashima, "Transfer learning with pre-trained conditional generative models," *Mach. Learn.*, vol. 114, no. 4, pp. 1–24, 2025, doi: 10.1007/s10994-025-06748-7.
- [71] U. Evci, V. Dumoulin, H. Larochelle, and M. C. Mozer, "Head2Toe: Utilizing Intermediate Representations for Better Transfer Learning," *Proc. Mach. Learn. Res.*, vol. 162, pp. 6009–6033, 2022.
- [72] S. Hansun *et al.*, "A New Ensemble Transfer Learning Approach with Rejection Mechanism for Tuberculosis Disease Detection," *IEEE Trans. Radiat. Plasma Med. Sci.*, vol. 9, no. 4, pp. 433–446, 2025, doi: 10.1109/TRPMS.2024.3474708.
- [73] Y. Gulzar, "Fruit Image Classification Model Based on MobileNetV2 with Deep Transfer Learning Technique," *Sustain.*, vol. 15, no. 3, 2023, doi: 10.3390/su15031906.
- [74] R. Jha, V. Bhattacharjee, and A. Mustafi, "Transfer Learning with Feature Extraction Modules for Improved Classifier Performance on Medical Image Data," *Sci. Program.*, vol. 2022, 2022, doi: 10.1155/2022/4983174.
- [75] P. Korshunov and S. Marcel, "Improving Generalization of Deepfake Detection With Data Farming and Few-Shot Learning," *IEEE Trans. Biometrics, Behav. Identity Sci.*, vol. 4, no. 3, pp. 386–397, 2022, doi: 10.1109/TBIOM.2022.3143404.
- [76] "TUM Visual Computing & Artificial Intelligence: Prof. Matthias Nießner." Accessed: Nov. 23, 2025. [Online]. Available: <https://niessnerlab.org/projects/roessler2018faceforensics.html>
- [77] S. A. Khan and D. T. Dang-Nguyen, "Deepfake Detection: Analyzing Model Generalization Across Architectures, Datasets, and Pre-Training Paradigms," *IEEE Access*, vol. 12, pp. 1880–1908, 2024, doi: 10.1109/ACCESS.2023.3348450.
- [78] D. Xiong, Z. Wen, C. Zhang, P. Xiao, and M. Wu, "Deepfake Detection Based on LSTM Networks with Facial Geometric Features," *2025 4th Int. Conf. Electron. Integr. Circuits Commun. Technol. EICCT 2025*, pp. 627–

- 630, 2025, doi: 10.1109/EICCT65471.2025.11099876.
- [79] Gandhi Krishna and V Patel Pritibala, "Python: An Inclusive Review of Its User-Friendly Nature and Applications," *Int. Res. J. Adv. Eng. Manag.*, vol. 3, no. 05, pp. 1872–1875, 2025, doi: 10.47392/irjaem.2025.0293.
- [80] N. Thaker and A. Shukla, "Python as Multi Paradigm Programming Language," *Int. J. Comput. Appl.*, vol. 177, no. 31, pp. 38–42, 2021, doi: 10.5120/ijca2021919775.
- [81] M. T. Abdullah and N. H. M. Ali, "Facial deepfake performance evaluation based on three detection tools: MTCNN, Dlib, and MediaPipe," *AIP Conf. Proc.*, vol. 3097, no. 1, 2024, doi: 10.1063/5.0213294.
- [82] Srinivasa Sai Abhijit Challapalli, B. Kandukuri, H. Bandireddi, and J. Pudi, "Profile Face Recognition and Classification Using Multi-Task CascadedConvolutional Networks," *J. Comput. Allied Intell.*, vol. 2, no. 6, pp. 65–78, 2024, doi: 10.69996/jcai.2024029.
- [83] E. Sinha, A. Kumar, and A. Tyagi, "OpenCV for Computer Vision Applications," *Int. J. Multidiscip. Res.*, vol. 7, no. 3, pp. 1–8, 2025, doi: 10.36948/ijfmr.2025.v07i03.44280.
- [84] J. Ansel *et al.*, "PyTorch 2: Faster Machine Learning Through Dynamic Python Bytecode Transformation and Graph Compilation," *Int. Conf. Archit. Support Program. Lang. Oper. Syst. - ASPLOS*, vol. 2, pp. 929–947, 2024, doi: 10.1145/3620665.3640366.
- [85] W. Hu *et al.*, "PyTorch Frame: A Modular Framework for Multi-Modal Tabular Learning," no. 1, pp. 1–10, 2024, [Online]. Available: <http://arxiv.org/abs/2404.00776>
- [86] X. Gao, F. Ramezanghorbani, O. Isayev, J. S. Smith, and A. E. Roitberg, "TorchANI: A Free and Open Source PyTorch-Based Deep Learning Implementation of the ANI Neural Network Potentials," *J. Chem. Inf. Model.*, vol. 60, no. 7, pp. 3408–3415, 2025, doi: 10.1021/acs.jcim.0c00451.
- [87] V. F. Ochkov, A. A. Sutchonov, and A. I. Tikhonov, "Python Computational Web Apps for STEM Engineering Education," *Int. J. Educ. Inf. Technol.*, vol. 15, pp. 130–136, 2021, doi: 10.46300/9109.2021.15.13.

- [88] G. Ayu Syafarina and I. Kalimantan Muhammad Arsyad Al Banjari Banjarmasin, "Implementasi Framework Streamlit Sebagai Prediksi Harga Jual Rumah Dengan Linear Regresi," *Metik J.*, vol. 7, pp. 121–125, 2023, doi: 10.47002/metik.v7i2.680.
- [89] T. Monks and A. Harper, "Improving the usability of open health service delivery simulation models using Python and web apps," *NIHR Open Res.*, vol. 3, p. 48, 2023, doi: 10.3310/nihropenres.13467.2.
- [90] B. Gavrilović and J. Mitrović, "Comparative analysis of the traffic accidents in the territory of the city of Užice for 2021 and 2022 using open data and the Streamlit application," *Vojnoteh. Glas.*, vol. 71, no. 3, pp. 616–633, 2023, doi: 10.5937/vojtehg71-44007.
- [91] H. Kimm, I. Paik, and H. Kimm, "Performance Comparision of TPU, GPU, CPU on Google Colaboratory over Distributed Deep Learning," *Proc. - 2021 IEEE 14th Int. Symp. Embed. Multicore/Many-Core Syst. MCSoc 2021*, pp. 312–319, 2021, doi: 10.1109/MCSoc51149.2021.00053.
- [92] T. Carneiro, R. V. M. Da Nobrega, T. Nepomuceno, G. Bin Bian, V. H. C. De Albuquerque, and P. P. R. Filho, "Performance Analysis of Google Colaboratory as a Tool for Accelerating Deep Learning Applications," *IEEE Access*, vol. 6, pp. 61677–61685, 2021, doi: 10.1109/ACCESS.2021.2874767.
- [93] P. Gujjar J and N. Kumar V, "Google Colaboratory : Tool for Deep Learning and Machine Learning Applications," *Indian Journal of Computer Science*. 2021.
- [94] A. Rössler, D. Cozzolino, L. Verdoliva, C. Riess, J. Thies, and M. Nießner, "FaceForensics: A Large-scale Video Dataset for Forgery Detection in Human Faces," 2018.
- [95] J. Gu, Y. Xu, J. Sun, and W. Liu, "Exploiting Deepfakes by Analyzing Temporal Feature Inconsistency," vol. 14, no. 12, 2023.