

DAFTAR PUSTAKA

- [1] T. Y. Wong, C. M. G. Cheung, M. Larsen, S. Sharma, and R. Simó, “Diabetic retinopathy,” *Nat. Rev. Dis. Prim.*, vol. 2, no. March, 2016, doi: 10.1038/nrdp.2016.12.
- [2] É. B. Rangel, C. O. Rodrigues, and J. R. De Sá, “Micro- and Macrovascular Complications in Diabetes Mellitus: Preclinical and Clinical Studies,” *J. Diabetes Res.*, vol. 2019, no. 1, pp. 96–123, 2019, doi: 10.1155/2019/2161085.
- [3] M. B. Sasongko *et al.*, “Prevalence of Diabetic Retinopathy and Blindness in Indonesian Adults With Type 2 Diabetes,” *Am. J. Ophthalmol.*, vol. 181, pp. 79–87, 2017, doi: 10.1016/j.ajo.2017.06.019.
- [4] I. D. Federation, “Data Diabetes in Indonesia (2021),” Idf. Accessed: Feb. 01, 2025. [Online]. Available: <https://idf.org/our-network/regions-and-members/western-pacific/members/indonesia/>
- [5] Y. Litha, “Jumlah Penderita Diabetes di Indonesia Terus Meningkat,” <https://www.voaindonesia.com/>.
- [6] Maudisha, “Preventing Diabetic Retinopathy in Diabetic Patients, FKUI Educated Health Workers and Communities on Kepulauan Seribu,” www.ui.ac.id. [Online]. Available: <https://www.ui.ac.id/en/preventing-diabetic-retinopathy-in-diabetic-patients/>
- [7] R. Amelia, M. D. Sari, V. Virgayanti, H. Wijaya, R. M. Situmorang, and S. Nadyah, “Clinical assessment of retinopathy in type 2 diabetes: a cross-sectional study,” *Fam. Med. Prim. Care Rev.*, vol. 26, no. 4, pp. 433–437, 2024, doi: 10.5114/fmpcr.2024.144910.
- [8] A. Nilay and A. R. Thool, “A Review of Pathogenesis and Risk Factors of Diabetic Retinopathy With Emphasis on Screening Techniques,” *Cureus*, vol. 14, no. 11, 2022, doi: 10.7759/cureus.31062.
- [9] M. Tan and Q. V. Le, “EfficientNetV2: Smaller Models and Faster Training,” *Proc. Mach. Learn. Res.*, vol. 139, pp. 10096–10106, 2021.
- [10] E. Suherman, B. Rahman, D. Hindarto, and H. Santoso, “Implementation of ResNet-50 on End-to-End Object Detection (DETR) on Objects,” *Sinkron*, vol. 8, no. 2, pp. 1085–1096, 2023, doi: 10.33395/sinkron.v8i2.12378.
- [11] G. Huang, Z. Liu, L. Van Der Maaten, and K. Q. Weinberger, “Densely connected convolutional networks,” *Proc. - 30th IEEE Conf. Comput. Vis. Pattern Recognition, CVPR 2017*, vol. 2017-Janua, pp. 2261–2269, 2017, doi: 10.1109/CVPR.2017.243.
- [12] S. Nalini Durga and K. Usha Rani, *A Review of Diabetic Retinopathy Screening Using Machine Learning*, vol. 215. 2021. doi: 10.1007/978-981-16-1941-0_16.
- [13] S. Karthik, M., & Dane, “APTOS 2019 Blindness Detection,” <https://www.kaggle.com>. Accessed: Feb. 07, 2025. [Online]. Available: <https://kaggle.com/competitions/aptos2019-blindness-detection>
- [14] E. Decencière *et al.*, “Feedback on a publicly distributed image database: The Messidor database,” *Image Anal. Stereol.*, vol. 33, no. 3, pp. 231–234, 2014, doi: 10.5566/ias.1155.
- [15] P. Porwal *et al.*, “Indian diabetic retinopathy image dataset (IDRiD): A database for diabetic retinopathy screening research,” *Data*, vol. 3, no. 3, pp. 1–8, 2018,

doi: 10.3390/data3030025.

- [16] S. Tummala, V. S. G. Thadikemalla, S. Kadry, M. Sharaf, and H. T. Rauf, "EfficientNetV2 Based Ensemble Model for Quality Estimation of Diabetic Retinopathy Images from DeepDRiD," *Diagnostics*, vol. 13, no. 4, 2023, doi: 10.3390/diagnostics13040622.
- [17] T. Mustaqim, P. H. Safitri, and D. Muhajir, "A Deep Learning Model Comparison for Diabetic Retinopathy Image Classification," *Sci. J. Informatics*, vol. 12, no. 1, pp. 21–30, 2025, doi: 10.15294/sji.v12i1.20939.
- [18] E. Learning, "Prediksi Kelulusan Calon Mahasiswa dengan Stacking Ensemble Learning Graduation Prediction for Prospective University Students using Stacking Ensemble Learning," vol. 14, pp. 2707–2723, 2025.
- [19] S. Vallukappully, I. van der Linde, and A. Chakraborty, "Early detection and classification of diabetic retinopathy by transfer learning of NASNet-large and ResNet-50 convolutional neural networks," *Informatics Med. Unlocked*, vol. 58, no. April, p. 101688, 2025, doi: 10.1016/j.imu.2025.101688.
- [20] H. Kwon, J. Park, and Y. Lee, "Stacking ensemble technique for classifying breast cancer," *Healthc. Inform. Res.*, vol. 25, no. 4, pp. 283–288, 2019, doi: 10.4258/hir.2019.25.4.283.
- [21] S. Aftab and S. Akhtar, "Diabetic Retinopathy Severity Classification Using Data Fusion and Ensemble Transfer Learning," *J. Softw. Eng. Appl.*, vol. 18, no. 01, pp. 1–23, 2025, doi: 10.4236/jsea.2025.181001.
- [22] K. Irsch, J. H. Medicine, D. L. Guyton, and J. H. Medicine, "Encyclopedia of Biometrics," *Encycl. Biometrics*, no. January 2009, pp. 10–16, 2009, doi: 10.1007/978-0-387-73003-5.
- [23] Z. He, "Deep Learning in Image Classification : A Survey Report," pp. 174–177, 2020, doi: 10.1109/ITCA52113.2020.00043.
- [24] S. A. Antar *et al.*, "Diabetes mellitus: Classification, mediators, and complications; A gate to identify potential targets for the development of new effective treatments," *Biomed. Pharmacother.*, vol. 168, p. 115734, 2023, doi: 10.1016/j.biopha.2023.115734.
- [25] C. Suedumrong, S. Phongmoo, T. Akarajaka, and K. Leksakul, "Diabetic Retinopathy Detection Using Convolutional Neural Networks with Background Removal, and Data Augmentation," *Appl. Sci.*, vol. 14, no. 19, 2024, doi: 10.3390/app14198823.
- [26] T. M. E. Center, "Diabetic Eye Disease Management." Accessed: Dec. 22, 2025. [Online]. Available: <https://www.themedicaleyecenter.com/diabetic-eye-disease-management-manchester/>
- [27] S. Ather, A. Wali, T. Malik, K. Fahd, and S. Fatima, "A novel vessel extraction technique for a three-way classification of diabetic retinopathy using cascaded classifier," *Multimed. Tools Appl.*, vol. 83, pp. 1–21, 2024, doi: 10.1007/s11042-024-18407-5.
- [28] X. Wang, C. Qiu, X. Ren, Z. Xiong, V. C. M. Leung, and D. Niyato, "Research Challenges and Future Directions," *Wirel. Networks (United Kingdom)*, pp. 105–108, 2022, doi: 10.1007/978-3-031-10186-1_6.
- [29] A. Oppermann, "What Is Deep Learning and How Does It Work?," <https://builtin.com/>. Accessed: Nov. 10, 2025. [Online]. Available: <https://builtin.com/machine-learning/deep-learning>

- [30] Levity, “Deep Learning vs. Machine Learning: What’s the Difference?,” May 2021. [Online]. Available: <https://medium.com/levity/deep-learning-vs-machine-learning-whats-the-difference-e367803bb96d>
- [31] K. M. Ting and I. H. Witten, “Issues in stacked generalization,” *J. Artif. Intell. Res.*, vol. 10, pp. 271–289, 1999, doi: 10.1613/jair.594.
- [32] “EfficientNetV2: Faster, Smaller, and Higher Accuracy than Vision Transformers,” Oct. 2022. [Online]. Available: <https://medium.com/data-science/efficientnetv2-faster-smaller-and-higher-accuracy-than-vision-transformers-98e23587bf04>
- [33] T. Lee, Y. Na, B. Kim, S. Lee, and Y. Choi, “Identification of Individual Hanwoo Cattle by Muzzle Pattern Images through Deep Learning,” *Animals*, vol. 13, p. 2856, 2023, doi: 10.3390/ani13182856.
- [34] Ultralytics, “ResNet-50 and Its Role In Computer Vision,” May 2025. [Online]. Available: <https://www.ultralytics.com/blog/what-is-resnet-50-and-what-is-its-relevance-in-computer-vision>
- [35] S. Leroux, T. Verbelen, P. Simoens, and B. Dhoedt, “Iterative neural networks for adaptive inference on resource-constrained devices,” *Neural Comput. Appl.*, vol. 34, 2022, doi: 10.1007/s00521-022-06910-5.
- [36] N. Radwan, “Leveraging Sparse and Dense Features for Reliable State Estimation in Urban Environments,” 2019. doi: 10.6094/UNIFR/149856.
- [37] A. T. Handoyo and G. P. Kusuma, “Severity Classification of Diabetic Retinopathy Using Ensemble Stacking Method,” *Rev. d’Intelligence Artif.*, vol. 36, no. 6, pp. 881–887, 2022, doi: 10.18280/ria.360608.
- [38] B. Soni, “Stacking to Improve Model Performance: A Comprehensive Guide on Ensemble Learning in Python,” May 2023. [Online]. Available: https://medium.com/@brijesh_soni/stacking-to-improve-model-performance-a-comprehensive-guide-on-ensemble-learning-in-python-9ed53c93ce28
- [39] S. V. Chilukoti, L. Shan, V. S. Tida, A. S. Maida, and X. Hei, “A reliable diabetic retinopathy grading via transfer learning and ensemble learning with quadratic weighted kappa metric,” *BMC Med. Inform. Decis. Mak.*, vol. 24, no. 1, pp. 1–12, 2024, doi: 10.1186/s12911-024-02446-x.
- [40] C. Cuerda, A. Zornoza, R. Tesoriero, J. A. Gallud, and D. Romero-Ayuso, “Deep Learning Assisted Cognitive Diagnosis for the D-Riska Application,” 2021. doi: 10.21203/rs.3.rs-942402/v1.
- [41] W. Huck, “Goal 3 Ensure healthy lives and promote well-being for all at all ages,” 2022. doi: 10.5771/9783748902065-153.
- [42] Messidor Program Partners, “Messidor-2 Dataset,” 2024. [Online]. Available: <https://www.adcis.net/en/third-party/messidor2/>
- [43] P. Porwal and others, “Indian Diabetic Retinopathy Image Dataset (IDRiD): A Database for Diabetic Retinopathy Screening Research,” *Data*, vol. 3, no. 3, pp. 1–7, 2018, [Online]. Available: <https://idrid.grand-challenge.org/>
- [44] REMMA, “HD-OCT CIRRUS 5000.” [Online]. Available: <https://remma.fr/en/model/hd-oct-cirrus-5000>
- [45] Beye, “VX-10 Mydriatic/Non-mydriatic Combination Retinal Camera.” [Online]. Available: <https://www.beye.com/product/vx-10-mydriaticnon-mydriatic-combination-retinal-camera>
- [46] Frost Optical Services, “Topcon TRC-NW6S Retinal Camera (Refurbished).”

[Online]. Available: <https://www.frostopical.co.uk/frost-store/topcon-trcnw6s-retinal-camera-refurbished/>