# DAFTAR PUSTAKA

[1] A. Gupta and R. Chhikara, "Diabetic Retinopathy: Present and Past," *Procedia Comput. Sci.*, vol. 132, pp. 1432–1440, 2018, doi: 10.1016/j.procs.2018.05.074.

[2] M. M. Butt, G. Latif, D. N. F. A. Iskandar, J. Alghazo, and A. H. Khan, "Multi-channel Convolutions Neural Network Based Diabetic Retinopathy Detection from Fundus Images," *Procedia Comput. Sci.*, vol. 163, pp. 283–291, 2019, doi: 10.1016/j.procs.2019.12.110.

[3] E. V. Carrera, A. Gonzalez, and R. Carrera, "Automated detection of diabetic retinopathy using SVM," *Proc. 2017 IEEE 24th Int. Congr. Electron. Electr. Eng. Comput. INTERCON 2017*, pp. 6–9, 2017, doi: 10.1109/INTERCON.2017.8079692.

[4] G. Information, "Diabetic Retinopathy - Asia," pp. 1–17, 2016.

[5] S. Prodi, T. Telekomunikasi, F. T. Elektro, and U. Telkom, "Klasifikasi Diabetes Retinopati Menggunakan Metode Statistical Region Merging Dan Convolutional Neural Network Classification of Diabetic Retinopathy Using Statistical Region Merging and Convolutional Neural," vol. 6, no. 2, pp. 4109–4116, 2019.

[6] N. Sikder, M. Masud, A. K. Bairagi, A. S. M. Arif, A. Al Nahid, and H. A. Alhumyani, "Severity classification of diabetic retinopathy using an ensemble learning algorithm through analyzing retinal images," *Symmetry (Basel).*, vol. 13, no. 4, 2021, doi: 10.3390/sym13040670.

[7] S. RIZAL, N. IBRAHIM, N. K. C. PRATIWI, S. SAIDAH, and R. Y. N. FU'ADAH, "Deep Learning untuk Klasifikasi Diabetic Retinopathy menggunakan Model EfficientNet," *ELKOMIKA J. Tek. Energi Elektr. Tek. Telekomun. Tek. Elektron.*, vol. 8, no. 3, p. 693, 2020, doi: 10.26760/elkomika.v8i3.693.

[8] W. L. Alyoubi, M. F. Abulkhair, and W. M. Shalash, "Diabetic retinopathy fundus image classification and lesions localization system using deep learning," *Sensors*, vol. 21, no. 11, pp. 1–22, 2021, doi: 10.3390/s21113704.

[9] J. Zhu, E. Zhang, and K. Rio-Tsonis, "Eye Anatomy," *eLS*, 2012, doi:

10.1002/9780470015902.a0000108.pub2.

[10] M. P. Gupta, A. A. Herzlich, T. Sauer, and C. C. Chan, "Retinal anatomy and pathology," *Dev. Ophthalmol.*, vol. 55, pp. 7–17, 2015, doi: 10.1159/000431128.

[11] A. T. Kharroubi, "Diabetes mellitus: The epidemic of the century," *World J. Diabetes*, vol. 6, no. 6, p. 850, 2015, doi: 10.4239/wjd.v6.i6.850.

[12] X. F. Zhang and B. K. H. Tan, "Effects of an ethanollic extract of Gynura procumbens on serum glucose, cholesterol and triglyceride levels in normal and streptozotocin-induced diabetic rats," *Singapore Med. J.*, vol. 41, no. 1, pp. 9–13, 2000.

[13] H. Purwandari, "Hubungan Obesitas Dengan Kadar Gula Darah Pada Karyawan Di Rs Tingkat Iv," *Ef. Issn. 0854-1922*, vol. 01, pp. 65–72, 2014.

[14] Asia Pacific Tele-Ophthalmology Society (APTOS), "APTOS 2019 Blindness Detection," 2019. [Online]. Available: https://www.kaggle.com/c/aptos2019-blindness-detection. [Accessed: 15-Nov-2021].

[15] H. E. Wiley and F. L. Ferris, *Nonproliferative Diabetic Retinopathy and Diabetic Macular Edema*, Fifth Edit., vol. 2. Elsevier Inc., 2012.

[16] G. Meyer-Schwickerath, "Diabetic retinopathy," *Int. Ophthalmol.*, vol. 10, no. 2, pp. 111–113, 1987, doi: 10.1007/BF00132133.

[17] G. Saselah, W. Weku, and L. Latumakulita, "Perbaikan Citra Digital dengan Menggunakan Filtering Technique dan Similarity Measurement," *d'CARTESIAN*, vol. 2, no. 2, p. 1, 2013, doi: 10.35799/dc.2.2.2013.3203.

[18] A. Vyas, S. Yu, and J. Paik, *Fundamentals of digital image processing*. 2018.

[19] M. Azad, M. Hasan, and M. K, "Color Image Processing in Digital Image," *Int. J. New Technol. Res.*, vol. 3, no. 3, p. 263334, 2017.

[20] F. F. Wahid and G. Raju, "Diabetic retinopathy detection using convolutional neural network—a study," *Lect. Notes Networks Syst.*, vol. 132, no. 1, pp. 127–133, 2021, doi: 10.1007/978-981-15-5309-7_13.

[21] W. S. Eka Putra, "Klasifikasi Citra Menggunakan Convolutional Neural Network (CNN) pada Caltech 101," *J. Tek. ITS*, vol. 5, no. 1, 2016, doi: 10.12962/j23373539.v5i1.15696.

[22]  Y. N. Fu'adah, S. Sa'idah, I. Wijayanto, N. Ibrahim, S. Rizal, and R. Magdalena, "Computer Aided Diagnosis for Early Detection of Glaucoma Using Convolutional Neural Network (CNN)," *Lect. Notes Electr. Eng.*, vol. 746 LNEE, pp. 467–475, 2021, doi: 10.1007/978-981-33-6926-9_40.

[23]  Manav Mandal, "Introduction to Convolutional Neural Networks (CNN)," 01-May-2021. [Online]. Available: https://www.analyticsvidhya.com/blog/2021/05/convolutional-neural-networks-cnn/. [Accessed: 15-Nov-2021].

[24]  T. Beysolow II, *Introduction to Deep Learning Using R: A step-by-Step Guide to learning and Implementing Deep Learning Models Using R*. 2017.

[25]  J. Wu, "Introduction to Convolutional Neural Networks," *Introd. to Convolutional Neural Networks*, pp. 1–31, 2017.

[26]  A. F. Agarap, "Deep Learning using Rectified Linear Units (ReLU)," no. 1, pp. 2–8, 2018.

[27]  S. Sharma, S. Sharma, and A. Anidhya, "Understanding Activation Functions in Neural Networks," *Int. J. Eng. Appl. Sci. Technol.*, vol. 4, no. 12, pp. 310–316, 2020.

[28]  C. Nwankpa, W. Ijomah, A. Gachagan, and S. Marshall, "Activation Functions: Comparison of trends in Practice and Research for Deep Learning," pp. 1–20, 2018.

[29]  J. D. Bodapati and N. Veeranjaneyulu, "Feature extraction and classification using Deep convolutional Neural Networks," *J. Cyber Secur. Mobil.*, vol. 8, no. 2, pp. 261–276, 2019, doi: 10.13052/jcsm2245-1439.825.

[30]  A. Pavate, J. Mistry, R. Palve, and N. Gami, "Diabetic Retinopathy Detection-MobileNet Binary Classifier," *Acta Sci. Med. Sci.*, vol. 4, no. 12, pp. 86–91, 2020, doi: 10.31080/asms.2020.04.0800.

[31]  A. Michele, V. Colin, and D. D. Santika, "Mobilenet convolutional neural networks and support vector machines for palmprint recognition," *Procedia Comput. Sci.*, vol. 157, pp. 110–117, 2019, doi: 10.1016/j.procs.2019.08.147.

[32]  M. Sandler, A. Howard, M. Zhu, A. Zhmoginov, and L. C. Chen, "MobileNetV2: Inverted Residuals and Linear Bottlenecks," *Proc. IEEE*

*Comput. Soc. Conf. Comput. Vis. Pattern Recognit.*, pp. 4510–4520, 2018, doi: 10.1109/CVPR.2018.00474.

[33] S. Taufiqurrahman, A. Handayani, B. R. Hermanto, and T. L. E. R. Mengko, "Diabetic Retinopathy Classification Using A Hybrid and Efficient MobileNetV2-SVM Model," *IEEE Reg. 10 Annu. Int. Conf. Proceedings/TENCON*, vol. 2020-Novem, pp. 235–240, 2020, doi: 10.1109/TENCON50793.2020.9293739.

[34] G. Mushtaq and F. Siddiqui, "Detection of diabetic retinopathy using deep learning methodology," *IOP Conf. Ser. Mater. Sci. Eng.*, vol. 1070, no. 1, p. 012049, 2021, doi: 10.1088/1757-899x/1070/1/012049.

[35] R. Patel and A. Chaware, "Transfer learning with fine-tuned MobileNetV2 for diabetic retinopathy," *2020 Int. Conf. Emerg. Technol. INCET 2020*, pp. 6–9, 2020, doi: 10.1109/INCET49848.2020.9154014.

[36] A. E. Minarno, M. H. C. Mandiri, Y. Azhar, F. Bimantoro, H. A. Nugroho, and Z. Ibrahim, "Classification of Diabetic Retinopathy Disease Using Convolutional Neural Network," *Int. J. Informatics Vis.*, vol. 6, no. 1, pp. 12–18, 2022, doi: 10.30630/joiv.6.1.857.

[37] A. Ayala, T. Ortiz Figueroa, B. Fernandes, and F. Cruz, "Diabetic retinopathy improved detection using deep learning," *Appl. Sci.*, vol. 11, no. 24, 2021, doi: 10.3390/app112411970.

[38] O. Khaled, M. ElSahhar, M. A. El-Dine, Y. Talaat, Y. M. I. Hassan, and A. Hamdy, "Automatic Classification of Preliminary Diabetic Retinopathy Stages using CNN," *Int. J. Adv. Comput. Sci. Appl.*, vol. 12, no. 2, pp. 713–721, 2021, doi: 10.14569/IJACSA.2021.0120289.