

DAFTAR PUSTAKA

- Aarthy, S.T., & Mazher, I. J. L. (2024). A novel deep learning approach for early detection of cardiovascular diseases from ECG signals. *Medical Engineering & Physics*, 125, 104111. <https://doi.org/10.1016/j.medengphy.2024.104111>
- Aina, F. Q., & Uyun, S. (2023). Deep Transfer Learning untuk Meningkatkan Akurasi Klasifikasi pada Citra Dermoskopi Kanker Kulit. *Jurnal Nasional Teknik Elektro Dan Teknologi Informasi*.
- Amaliah, A., & Puspita, I. (2018). Deteksi Lokasi Tumor Payudara Menggunakan Algoritma Morfologi Dan Multilevel Threshold. *Jurnal Keteknikan Dan Sains (JUTEKS)-LPPM UNHAS*, 1(2). <http://peipa.essex.ac.uk/info/mias.html>
- American Cancer Society. (2021). *Type of Breast Cancer*. <https://www.cancer.org/cancer/breast-cancer/understanding-a-breast-cancer-diagnosis/types-of-breast-cancer.html>
- Ananda, J. S., Fendriani, Y., & Pebralia, J. (2024). Classification Analysis of Brain Tumor Disease In Radiographic Images Using Support Vector Machines (SVM) With Python. *JoP*, 9(3), 110–115.
- Aslam, C. M., Narayana, D. S., & Priya, K. P. (2022). Detection of Breast Cancer Using Modified Markov Model. *Traitement Du Signal*, 39(6), 2195–2201. <https://doi.org/10.18280/ts.390634>
- Ayu, G., Dewi, T., & Hendrati, L. Y. (2015). Analisis Risiko Kanker Payudara Berdasar Riwayat Pemakaian Kontrasepsi Hormonal Dan Usia Menarche. *Jurnal Berkala Epidemiologi*, 3(1), 12–23.
- Binarwati, L., Mukhlash, I., & Soetrisno, S. (2017). Implementasi Algoritma Genetika untuk Optimalisasi Random Forest dalam Proses Klasifikasi Penerimaan Tenaga Kerja Baru : Studi Kasus PT.XYZ. *Jurnal Sains Dan Seni ITS*, 6(2). <https://doi.org/10.12962/j23373520.v6i2.26887>
- Breiman, L. (2001). Random Forest . *Machine Learning*, 45(1), 5–32. <https://doi.org/10.1023/A:1010933404324>
- Buana, S. I. K. (2018). Aplikasi Untuk Pengoperasian Komputer Dengan Mendeteksi Gerakan Menggunakan OpenCV Python. *Prosiding SINTAK*.
- Buda, M., Maki, A., & Mazurowski, M. A. (2018). A systematic study of the class imbalance problem in convolutional neural networks. *Neural Networks*, 106, 249–259. <https://doi.org/10.1016/j.neunet.2018.07.011>
- Chicco, D., & Jurman, G. (2020). The advantages of the Matthews correlation coefficient (MCC) over F1 score and accuracy in binary classification evaluation. *BMC Genomics*, 21(1), 6. <https://doi.org/10.1186/s12864-019-6413-7>

- Chollet, F. (2018). *Deep Learning with Python*. Manning.
- Faridah, N., & Uyun, S. (2025). Analisis Optimasi pada Algoritma Convolutional Neural Network untuk Klasifikasi Kanker Payudara. *JEPIN (Jurnal Edukasi Dan Penelitian Informatika)*.
- Fauzan, N. M., Rahmat, B., & Junaidi, A. (2024). Klasifikasi Citra Penyakit Kanker Mulut Menggunakan Arsitektur Resnet50 Optimasi Adam Dan SGD. *Jurnal Informatika Dan Teknik Elektro Terapan*, 12(3). <https://doi.org/10.23960/jitet.v12i3.4732>
- Fico, N., Di Grezia, G., Cuccurullo, V., Salvia, A. A. H., Iacomino, A., Sciarra, A., & Gatta, G. (2023). Breast Imaging Physics in Mammography (Part I). *Diagnostics*, 13(20), 3227. <https://doi.org/10.3390/diagnostics13203227>
- Gading, S. M., Perdana, W. A., & Hartama, D. (2017). Penerapan Data Mining Pada Populasi Daging Ayam Ras Pedaging Di Indonesia Berdasarkan Provinsi Menggunakan K-Means Clustering. *InfoTekJar (Jurnal Nasional Informatika Dan Teknologi Jaringan)*, 2(1). <https://www.bps.go.id>.
- Geron, A. (2019). *Hands-on Machine Learning with Scikit-Learn, Keras, and TensorFlow Concepts, Tools, and Techniques to Build Intelligent Systems* (N. Tache, Ed.; Second Edition). O'Reilly Media.
- Gholamy, A., Kreinovich, V., & Kosheleva, O. (2018). *A Pedagogical Explanation A Pedagogical Explanation Part of the Computer Sciences Commons*. https://scholarworks.utep.edu/cs_techrephttps://scholarworks.utep.edu/cs_techrep/1209
- Goenawan, A. D., & Hartati, S. (2024). The Comparison of K-Nearest Neighbors and Random Forest Algorithm to Recognize Indonesian Sign Language in a Real-Time. *Scientific Journal of Informatics*, 11(1), 237–244. <https://doi.org/10.15294/sji.v11i1.48475>
- Goodfellow, I., Bengio, Y., & Courville, A. (2022). *Deep Learning*.
- Gorunescu, F. (2011). *Data Mining* (Vol. 12). Springer Berlin Heidelberg. <https://doi.org/10.1007/978-3-642-19721-5>
- Grandini, M., Bagli, E., & Visani, G. (2020). *Metrics For Multi-Class Classification: An Overview*.
- Hadush, S., Girmay, Y., Sinamo, A., & Hagos, G. (2020). *Breast Cancer Detection Using Convolutional Neural Networks*.
- Heikal, A., El-Ghamry, A., Elmougy, S., & Rashad, M. Z. (2024). Fine tuning deep learning models for breast tumor classification. *Scientific Reports*, 14(1), 10753. <https://doi.org/10.1038/s41598-024-60245-w>

- Helja, M., Nurhasanah, ., & Sampurno, J. (2019). Analisis Fraktal Citra Mammogram Berbasis Tekstur Sebagai Pendukung Diagnosis Kanker Payudara. *POSITRON*, 3(2). <https://doi.org/10.26418/positron.v3i2.5131>
- Henderi , Wahyuningsih , T., & Rahwanto, E. (2021). Comparison of Min-Max normalization and Z-Score Normalization in the K-nearest neighbor (kNN) Algorithm to Test the Accuracy of Types of Breast Cancer. *International Journal of Informatics and Information System*, 4(1), 13–20. <http://archive.ics.uci.edu/ml>.
- Hossin, M., & Sulaiman, M. N. (2015). A Review on Evaluation Metrics for Data Classification Evaluations. *International Journal of Data Mining & Knowledge Management Process*, 5(2), 01–11. <https://doi.org/10.5121/ijdkp.2015.5201>
- Husen, D. (2024). Evaluasi Teknik Augmentasi Data Untuk Klasifikasi Tumor Otak Menggunakan CNN Pada Citra MRI. *TEKNIMEDIA*, 5, 219–227.
- Jadeja, V., Rao, A. L. N., Srivastava, A., Singh, S., Chaturvedi, P., & Bhardwaj, G. (2023). Convolutional Neural Networks: A Comprehensive Review of Architectures and Application. *2023 6th International Conference on Contemporary Computing and Informatics (IC3I)*, 460–467. <https://doi.org/10.1109/IC3I59117.2023.10397695>
- Jesinger, R. A. (2014). Breast Anatomy for the Interventionalist. *Techniques in Vascular and Interventional Radiology*, 17(1), 3–9. <https://doi.org/10.1053/j.jvir.2013.12.002>
- Jordan, M. I., & Mitchell, T. M. (2015). Machine learning: Trends, perspectives, and prospects. *Science*, 349(6245), 255–260. <https://doi.org/10.1126/science.aaa8415>
- Kashyap, D., Pal, D., Sharma, R., Garg, V. K., Goel, N., Koundal, D., Zaguia, A., Koundal, S., & Belay, A. (2022). Global Increase in Breast Cancer Incidence: Risk Factors and Preventive Measures. *BioMed Research International*, 2022, 1–16. <https://doi.org/10.1155/2022/9605439>
- Kathale, P., & Thorat, S. (2020). Breast Cancer Detection and Classification. *International Conference on Emerging Trends in Information Technology and Engineering (Ic-ETITE)*, 1–5. <https://doi.org/10.1109/ic-ETITE47903.2020.367>
- Kulsum, U., & Cherid, A. (2023). Penerapan Convolutional Neural Network Pada Klasifikasi Tanaman Menggunakan ResNet50. *SIMKOM*, 8(2), 221–228. <https://doi.org/10.51717/simkom.v8i2.191>

- Lecun, Y., Bottou, L., Bengio, Y., & Haffner, P. (1998). Gradient-based learning applied to document recognition. *Proceedings of the IEEE*, 86(11), 2278–2324. <https://doi.org/10.1109/5.726791>
- Li, R. (2024). A review of neural networks in handwritten character recognition. *Applied and Computational Engineering*, 92(1), 169–174. <https://doi.org/10.54254/2755-2721/92/20241736>
- Makki, J. (2015). Diversity of Breast Carcinoma: Histological Subtypes and Clinical Relevance. *Clinical Medicine Insights: Pathology*, 8, CPath.S31563. <https://doi.org/10.4137/CPath.S31563>
- Muzawi, R., Jannah, M., Mahrunnisa, & Soleha, M. (n.d.). *Pengantar Dasar Deep Learning*.
- National Cancer Institute. (2021, October). *What Is Cancer?* NTI, National Cancer Institute. <https://www.cancer.gov/about-cancer/understanding/what-is-cancer>
- Pandya, S., & Moore, R. G. (2011). Breast Development and Anatomy. *Clinical Obstetrics & Gynecology*, 54(1), 91–95. <https://doi.org/10.1097/GRF.0b013e318207ffe9>
- Pania, P. E., Wahyuni, D., Adriat, R., & Arsyad, M. (2024). Klasifikasi Keganasan Kanker Paru Menggunakan Algoritma Propagasi Balik pada Citra CT-Scan Classification of Malignancy of Lung Cancer Using Backpropagation Algorithm on CT-Scan Images. In *Jurnal ILMU DASAR* (Vol. 25, Issue 2).
- Pedregosa Fabian, Varoquaux, G., Michel, V., Grisel OLIVIERGRISEL, O., Blondel, M., Prettenhofer, P., Weiss, R., Vanderplas, J., Cournapeau, D., Pedregosa, F., Varoquaux, G., Gramfort, A., Thirion, B., Grisel, O., Dubourg, V., Passos, A., & Brucher, M. (2011). Scikit-learn: Machine Learning in Python. In *Journal of Machine Learning Research* (Vol. 12). <http://scikit-learn.sourceforge.net>.
- Pérez, B. D., García Vázquez, J. P., & Salomón-Torres, R. (2021). Evaluation of convolutional neural networks' hyperparameters with transfer learning to determine sorting of ripe medjool dates. *Agriculture (Switzerland)*, 11(2), 1–12. <https://doi.org/10.3390/agriculture11020115>
- Pratiwi, M., Alexander, Harefa, J., & Nanda, S. (2015). Mammograms Classification Using Gray-level Co-occurrence Matrix and Radial Basis Function Neural Network. *Procedia Computer Science*, 59, 83–91. <https://doi.org/10.1016/j.procs.2015.07.340>
- Purwanti, S., Syukur, N. A., & Haloho, C. B. (2021). Faktor Risiko Berhubungan dengan Kejadian Kanker Payudara Wanita. *Jurnal Bidan Cerdas*, 3(4), 168–175. <https://doi.org/10.33860/jbc.v3i4.460>

- Putri, W. R. A., Yudhana, A., & Sunardi. (2022). Klasifikasi Kanker Payudara Menggunakan Metode Digital Mammogram. *Jurnal Teknik Informatika Dan Sistem Informasi*, 9(4). <http://jurnal>.
- Rani, M. D. (2024). *Klasifikasi Penyakit Paru Pada Foto Rontgen Berdasarkan Ekstraksi Fitur Gray Level Co-occurrence Matrix (GLCM) Dengan Jaringan Syaraf Tiruan Backpropagation Menggunakan Python GUI* [Universitas Jambi]. <https://repository.unja.ac.id/62252/1/Skripsi%20Debby%20Mustika%20Rani%20Full.pdf>
- Ravly, A. M., Fajri, M., & Nina Sulistyowati. (2022). Komparasi Kinerja Algoritma Xgboost Dan Algoritma Support Vector Machine (SVM) Untuk Diagnosa Penyakit Kanker Payudara. *Jurnal Informatika Dan Komputer*, 6(1), 1–5.
- Rizka, A., Akbar, M. K., & Putri, N. A. (2022). Carcinoma Mammaria Sinistra T4bN2M1 Metastasis Pleura. *AVERROUS: Jurnal Kedokteran Dan Kesehatan Malikussaleh*, 8(1), 23. <https://doi.org/10.29103/averrous.v8i1.7006>
- Rosadi, M. I., Arifin, A. Z., & Yuniarti, A. (2016). Klasifikasi Massa Pada Citra Mammogram Menggunakan Kombinasi Seleksi Fitur F-Score Dan LS-SVM. *TEKNOLOGI*, 6(1), 27–37.
- Shalev-Shwartz, S., & Ben-David, S. (2014). *Understanding Machine Learning: From Theory to Algorithms*. Cambridge University Press. <https://doi.org/DOI:10.1017/CBO9781107298019>
- Sheykhumousa, M., Mahdianpari, M., Ghanbari, H., Mohammadimanesh, F., Ghamisi, P., & Homayouni, S. (2020). Support Vector Machine Versus Random Forest for Remote Sensing Image Classification: A Meta-Analysis and Systematic Review. *IEEE Journal of Selected Topics in Applied Earth Observations and Remote Sensing*, 13, 6308–6325. <https://doi.org/10.1109/JSTARS.2020.3026724>
- Suharto, A. (2023). *Fundamental Bahasa Pemrograman Python*. CV.EUREKA MEDIA AKSARA.
- Tharwat, A. (2021). Classification assessment methods. *Applied Computing and Informatics*, 17(1), 168–192. <https://doi.org/10.1016/j.aci.2018.08.003>
- Ulagamuthalvi, V., Kulanthaivel, G., Balasundaram, A., & Kumar Sivaraman, A. (2022). Breast Mammogram Analysis and Classification Using Deep Convolution Neural Network. *Computer Systems Science and Engineering*, 43(1), 275–289. <https://doi.org/10.32604/csse.2022.023737>
- Victor, I. A., Murali, S., Deepu, R., & Shivamurthy, R. C. (2021). ResNet-50 vs VGG-19 vs training from scratch: A comparative analysis of the segmentation

- and classification of Pneumonia from chest X-ray images. *Global Transitions Proceedings*, 2(2), 375–381. <https://doi.org/10.1016/j.gltip.2021.08.027>
- Wang, X., Chen, H., Ran, A.-R., Luo, L., Chan, P. P., Tham, C. C., Chang, R. T., Mannil, S. S., Cheung, C. Y., & Heng, P.-A. (2020). Towards multi-center glaucoma OCT image screening with semi-supervised joint structure and function multi-task learning. *Medical Image Analysis*, 63, 101695. <https://doi.org/https://doi.org/10.1016/j.media.2020.101695>
- WHO. (2024). *Breast Cancer [Internet]*. 2024 [Dikutip 25 September 2024]. <https://www.who.int/news-room/fact-sheets/detail/breast-cancer>
- Xu, D., & Tian, Y. (2015). A Comprehensive Survey of Clustering Algorithms. *Annals of Data Science*, 2(2), 165–193. <https://doi.org/10.1007/s40745-015-0040-1>
- Yamashita, R., Nishio, M., Do, R. K. G., & Togashi, K. (2018). Convolutional neural networks: an overview and application in radiology. *Insights into Imaging*, 9(4), 611–629. <https://doi.org/10.1007/s13244-018-0639-9>
- Yosinski, J., Clune, J., Bengio, Y., & Lipson, H. (2014). *How transferable are features in deep neural networks?*
- Zhang, Z., Zhao, Y., Canes, A., Steinberg, D., & Lyashevska, O. (2019). Predictive analytics with gradient boosting in clinical medicine. *Annals of Translational Medicine*, 7(7), 152–152. <https://doi.org/10.21037/atm.2019.03.29>
- Zhu, Z., Wang, S.-H., & Zhang, Y.-D. (2023). A Survey of Convolutional Neural Network in Breast Cancer. *Computer Modeling in Engineering & Sciences*, 136(3), 2127–2172. <https://doi.org/10.32604/cmes.2023.025484>