

## DAFTAR PUSTAKA

- Afis Julianto, Andi Sunyoto, & Ferry Wahyu Wibowo. (2022). Optimasi Hyperparameter Convolutional Neural Network Untuk Klasifikasi Penyakit Tanaman Padi. *TEKNIMEDIA: Teknologi Informasi Dan Multimedia*, 3(2), 98–105. <https://doi.org/10.46764/teknimedia.v3i2.77>
- Ahyaruddin, W., & Topiq, S. (2021). Sistem Pakar Diagnosa Penyakit Paru-Paru Pada Anak Dengan Metode Naive Bayes Berbasis Web (Vol. 2, Issue 1). <https://eprosiding.ars.ac.id/index.php/pti>
- Andika, L. A., Pratiwi, H., & Handajani, S. S. (2019). Klasifikasi Penyakit Pneumonia Menggunakan Metode Convolutional Neural Network Dengan Optimasi Adaptive Momentum. *Indonesian Journal of Statistics and Its Applications*, 3(3), 331–340. <https://doi.org/10.29244/ijisa.v3i3.560>
- Apuke, O. D. (2017). Quantitative Research Methods : *A Synopsis Approach*. *Kuwait Chapter of Arabian Journal of Business and Management Review*, 6(11), 40–47. <https://doi.org/10.12816/0040336>
- Baldi, P., & Sadowski, P. (2014). *The dropout learning algorithm*. *Artificial Intelligence*, 210(1), 78–122. <https://doi.org/10.1016/j.artint.2014.02.004>
- Bradski, G. R. and Kaehler, A. (2011) *Learning OpenCV: computer vision with the OpenCV library. 1. ed., [Nachdr.]*. Beijing: O'Reilly.
- Dendi Maysanjaya, I. M. (2020). Klasifikasi Pneumonia pada Citra X-rays Paru-paru dengan Convolutional Neural Network (*Classification of Pneumonia Based on Lung X-rays Images using Convolutional Neural Network*). In *Jurnal Nasional Teknik Elektro dan Teknologi Informasi* | (Vol. 9, Issue 2).
- Feng, J., & Lu, S. (2019). *Performance Analysis of Various Activation Functions in Artificial Neural Networks*. *Journal of Physics: Conference Series*, 1237(2). <https://doi.org/10.1088/1742-6596/1237/2/022030>
- Fibrianto, A. (2018). Klasifikasi Paru-Paru Normal, Penyakit Tuberkulosis (TBC) Dan Efusi Pleura Pada Manusia Menggunakan Jaringan Syaraf Tiruan Propagasi Balik. *E-Proceeding of Engineering*, 5(3), 5071–5078.
- Flach, P. (2019). *Performance Evaluation in Machine Learning: The Good, the Bad, the Ugly, and the Way Forward*. *Proceedings of the AAAI Conference on Artificial Intelligence*, 33(01), 9808–9814. <https://doi.org/10.1609/aaai.v33i01.33019808>
- Ghani, S., Rasyad, A., Glenedias Widodo, V., Nuriy, M. N., Pravitasari, A. A., Gumelar, F., Statistika, D., Matematika, F., Ilmu, D., Alam, P., & Padjadjaran, U. (2023). Analisis Deteksi Pneumonia Pada Citra X-ray Dengan Menggunakan Convolutional Neural Network.
- Goodfellow, I., Bengio, Y., & Courville, A. (2016). *Deep Learning*.

- Guan, Q., Huang, Y., Zhong, Z., Zheng, Z., Zheng, L., & Yang, Y. (2020). *Thorax Disease Classification With Attention Guided Convolutional Neural Network*. *Pattern Recognition Letters*, 131, 38–45. <https://doi.org/10.1016/j.patrec.2019.11.040>
- Indraani, S. E., Jumaddina, I. D., Ridha, S., & Sinaga, S. (2014). *Implementasi Edge Detection Pada Citra Grayscale dengan Metode Operator Prewitt dan Operator Sobel*. *Majalah Ilmiah Inti*, 12, 1-5.
- Jaelani Akbar, M., Sardjono, W., Cahyanti, M., Ericks, D., & Swedia, R. (2020). *Menggunakan Deep Learning Convolutional Neural Network*. In *Fakultas Teknologi Industri* (Vol. 2, Issue 100).
- Jähne, B. (2000). *Computer Vision and Applications A Guide for Students and Practitioners*.
- Jain, R., Nagrath, P., Kataria, G., Sirish Kaushik, V., & Jude Hemanth, D. (2020). *Pneumonia Detection In Chest X-Ray Images Using Convolutional Neural Networks And Transfer Learning*. *Measurement: Journal of the International Measurement Confederation*, 165, 108046. <https://doi.org/10.1016/j.measurement.2020.108046>
- Junaidi, Iskandar, 2010, *Penyakit Paru dan Saluran Napas*, Jakarta, Bhuana Ilmu Populer
- Ker, J., Wang, L., Rao, J., & Lim, T. (2017). *Deep Learning Applications in Medical Image Analysis*. *IEEE Access*, 6, 9375–9379. <https://doi.org/10.1109/ACCESS.2017.2788044>
- Khairina, N., Sibarani, T. T. S., Muliono, R., Sembiring, Z., & Muhathir, M. (2022). *Identification of Pneumonia using The K-Nearest Neighbors Method using HOG Fitur Feature Extraction*. *Journal of Informatics and Telecommunication Engineering*, 5(2), 562–568. <https://doi.org/10.31289/jite.v5i2.6216>
- Kim, J. H., Seo, S. Y., Song, C. G., & Kim, K. S. (2019). *Assessment of Electrocardiogram Rhythms by GoogLeNet Deep Neural Network Architecture*. *Journal of Healthcare Engineering*, 2019. <https://doi.org/10.1155/2019/2826901>
- Kingma, D. P., & Ba, J. (2014). *Adam: A Method for Stochastic Optimization*. <http://arxiv.org/abs/1412.6980>
- Kusumanto, R. D., & Tompunu, A. N. (2011). *Pengolahan Citra Digital Untuk Mendeteksi Obyek Menggunakan Pengolahan Warna Model Normalisasi Rgb*. In *Seminar Nasional Teknologi Informasi & Komunikasi Terapan*.
- Lanaro, G., Nguyen, Q., & Kasampalis, S. (2019). *Advanced Python Programming: Build High Performance, Concurrent, And Multi-Threaded Apps With Python Using Proven Design Patterns*. Packt Publishing Ltd.
- Lecun, Y., Bengio, Y., & Hinton, G. (2015). *Deep learning*. In *Nature* (Vol. 521, Issue 7553, pp. 436–444). *Nature Publishing Group*. <https://doi.org/10.1038/nature14539>
- Lee, K. B., Cheon, S., & Kim, C. O. (2017). *A Convolutional Neural Network For Fault Classification And Diagnosis In Semiconductor Manufacturing Processes*. *IEEE Transactions On Semiconductor Manufacturing*, 30(2), 135–142.

<https://doi.org/10.1109/TSM.2017.2676245>

- Markoulidakis, I., Rallis, I., Georgoulas, I., Kopsiaftis, G., Doulamis, A., & Doulamis, N. (2021). *Multiclass Confusion Matrix Reduction Method And Its Application On Net Promoter Score Classification Problem. Technologies, 9(4)*. <https://doi.org/10.3390/technologies9040081>
- Muhammadiyah Jember, U., Trisetia Indrawan, G., Nilogiri, A., & Azizah Al Faruq, H. (2022). *Diagnosis COVID-19 Berdasarkan Citra X-Ray Paru-Paru Menggunakan Metode Convolutional Neural Network Diagnose Of COVID-19 Based On X-Ray Image Of The Lungs Using Convolutional Neural Network. In Jurnal Smart Teknologi (Vol. 3, Issue 4)*. <Http://Jurnal.Unmuhjember.Ac.Id/Index.Php/JST>
- Naufal Abdillah, Andrey K.W. Hapantenda, Ahmad Habib, I. L. (2022). *Klasifikasi Viral Pneumonia Menggunakan Metode Convolutional Neural Network Dan Support Vector Machine. Konvergensi, 18(8.5.2017), 2003–2005*.
- Naufal, M. F. (2021). *Comparative Analysis Of Image Classification Algorithm For. Jurnal Teknologi Informasi Dan Ilmu Komputer, 8(2), 311–318*. <https://doi.org/10.25126/jtiik.202184553>
- Ningrum, F. C., Suherman, D., Aryanti, S., Prasetya, H. A., & Saifudin, A. (2019). *Pengujian Black Box Pada Aplikasi Sistem Seleksi Sales Terbaik Menggunakan Teknik Equivalence Partitions. 4(4)*. <http://openjournal.unpam.ac.id/index.php/informatika>
- Okada, P., Buathong, R., Phuygun, S., Thanadachakul, T., Parnmen, S., Wongboot, W., Waicharoen, S., Wacharapluesadee, S., Uttayamakul, S., Vachiraphan, A., Chittaganpitch, M., Mekha, N., Janejai, N., Iamsirithaworn, S., Lee, R. T. C., & Maurer-Stroh, S. (2020). *Early Transmission Patterns Of Coronavirus Disease 2019 (COVID-19) In Travellers From Wuhan To Thailand, January 2020. In Eurosurveillance (Vol. 25, Issue 8). European Centre For Disease Prevention And Control (ECDC)*. <https://doi.org/10.2807/1560-7917.ES.2020.25.8.2000097>
- Organization, W. H. (2022). *Global Tuberculosis Report 2022*. <http://apps.who.int/bookorders>.
- Perez, L., & Wang, J. (2017). *The Effectiveness of Data Augmentation in Image Classification using Deep Learning*. <http://arxiv.org/abs/1712.04621>
- Rafly Alwanda, M., Putra, R., Ramadhan, K., & Alamsyah, D. (2020). *Implementasi Metode Convolutional Neural Network Menggunakan Arsitektur LeNet-5 untuk Pengenalan Doodle. In Jurnal Algoritme (Vol. 1, Issue 1)*.
- Rajpurkar, P., Irvin, J., Zhu, K., Yang, B., Mehta, H., Duan, T., Ding, D., Bagul, A., Langlotz, C., Shpanskaya, K., Lungren, M. P., & Ng, A. Y. (2017). *CheXNet: Radiologist-Level Pneumonia Detection on Chest X-Rays with Deep Learning*. <http://arxiv.org/abs/1711.05225>
- Raras, C., Widiawati, A., & Korespondensi, P. (2022). *Pengaruh Dataset Terhadap Performa Convolutional Neural Network Pada Klasifikasi X-Ray Pasien Covid-19*.

<https://doi.org/10.25126/jtiik.202295645>

- Rasywir, E., Sinaga, R., & Pratama, Y. (2020). Analisis dan Implementasi Diagnosis Penyakit Sawit dengan Metode Convolutional Neural Network (CNN). *Paradigma - Jurnal Komputer Dan Informatika*, 22(2), 117–123. <https://doi.org/10.31294/p.v22i2.8907>
- Raziani, S., & Azimbagirad, M. (2022). Deep CNN *Hyperparameter Optimization Algorithms For Sensor-Based Human Activity Recognition*. *Neuroscience Informatics*, 2(3), 100078. <https://doi.org/10.1016/j.neuri.2022.100078>
- Razief Moch Diar, R. Yunendah Nur Fu'Adah, K. U. (2022). Klasifikasi Penyakit Paru-Paru Berbasis Pengolahan Citra *X Ray* Menggunakan *Convolutional Neural Network (Classification Of The Lung Diseases Based On X Ray Image Processing Using Convolutional Neural Network)*.
- Rosenblatt, F. (1958). *The Perceptron: A Probabilistic Model For Information Storage And Organization In The Brain 1*. In *Psychological Review* (Vol. 65, Issue 6).
- Ruder, S. (2016). *An Overview Of Gradient Descent Optimization Algorithms*. <http://arxiv.org/abs/1609.04747>
- Sari, I. R. (2020). Implementasi Convolutional Neural Networks (Cnn) Untuk Klasifikasi Citra Benih Kacang Hijau Berkualitas. *Engineering, Construction and Architectural Management*, 25(1), 1–9.
- Shadin, N. S., Sanjana, S., & Lisa, N. J. (2021). COVID-19 *Diagnosis from Chest X-ray Images Using Convolutional Neural Network(CNN) and InceptionV3*. *2021 International Conference on Information Technology, ICIT 2021 - Proceedings*, 3(September 2012), 799–804. <https://doi.org/10.1109/ICIT52682.2021.9491752>
- Sokolova, M., & Lapalme, G. (2009). *A systematic analysis of performance measures for classification tasks*. *Information Processing and Management*, 45(4), 427–437. <https://doi.org/10.1016/j.ipm.2009.03.002>
- Suhendra, C. D., & Wardoyo, R. (2015). Penentuan Arsitektur Jaringan Syaraf Tiruan Backpropagation (Bobot Awal dan Bias Awal) Menggunakan Algoritma Genetika. *IJCCS (Indonesian Journal of Computing and Cybernetics Systems)*, 9(1), 77. <https://doi.org/10.22146/ijccs.6642>
- Sukanto, R. A., & Shalahuddin, M. (2015). Kolaborasi Rekayasa Perangkat Lunak Terstruktur dan Berorientasi Objek. Bandung: Informatika.
- Susanto, A., & Meiryani, (2019). System Development Method with The Prototype Method. *International Journal Of Scientific & Technology Research*, 8, 7. [www.ijstr.org](http://www.ijstr.org)
- Sutoyo, T, Mulyanto. Edy, Suhartono. Vincent, Dwi Nurhayati Oky, Wijanarto., 2009. “Teori Pengolahan Citra Digital”, Andi Yogyakarta dan UDINUS Semarang.
- Suyanto, M. L. (2018). Tingkat Dasar dan Lanjut. Informatika Bandung.
- Ucar, F., & Korkmaz, D. (2020). *COVID Diagnosis-Net: Deep Bayes-SqueezeNet based*

*diagnosis of the coronavirus disease 2019 (COVID-19) from X-ray images. Medical Hypotheses, 140.* <https://doi.org/10.1016/j.mehy.2020.109761>

Wahid, M. I., Mustamin, S. A., & Lawi, D. A. (2021). *Konferensi Nasional Ilmu Komputer (KONIK) 2021 Identifikasi Dan Klasifikasi Citra Penyakit Daun Tomat Menggunakan Arsitektur Inception V4.*

Wang, X., Peng, Y., Lu, L., Lu, Z., Bagheri, M., & Summers, R. M. (2017). Chestx-Ray8: Hospital-Scale Chest X-Ray Database and Benchmarks on Weakly-Supervised Classification And Localization of Common Thorax Diseases. *Proceedings - 30th IEEE Conference on Computer Vision and Pattern Recognition, CVPR 2017, 2017-January*, 3462–3471. <https://doi.org/10.1109/CVPR.2017.369>

Wati, R. A., Irsyad, H., & Rivani, M. E. A. R. (2020). Klasifikasi Pneumonia Menggunakan Metode Support Vector Machine. *Jurnal Algoritme, 1(1)*, 21–32. <http://download.garuda.kemdikbud.go.id/article.php?article=2652619&val=24585&title=Klasifikasi Pneumonia Menggunakan Metode Support Vector Machine>

Widiyanto, S., Fitrianto, R., & Wardani, D. T. (2020). *Implementation of Convolutional Neural Network Method for Classification of Diseases in Tomato Leaves.* [www.kaggle.com](http://www.kaggle.com).

Wijaya, A. E., Swastika, W., & Kelana, O. H. (2021). Implementasi Transfer Learning Pada Convolutional Neural Network untuk Diagnosis Covid-19 Dan Pneumonia Pada Citra X-Ray. *Sainsbertek Jurnal Ilmiah Sains & Teknologi, 2(1)*, 10–15. <https://doi.org/10.33479/sb.v2i1.125>

Wira, J., & Putra, G. (2020). *Pengenalan Konsep Pembelajaran Mesin dan Deep Learning Edisi 1.4 (17 Agustus 2020).*

Wulandari, I., Yasin, H., & Widiharih, T. (2020). Klasifikasi Citra Digital Bumbu Dan Rempah Dengan Algoritma Convolutional Neural Network (Cnn). <https://ejournal3.undip.ac.id/index.php/gaussian/>

Yao, L., Poblens, E., Dagunts, D., Covington, B., Bernard, D., & Lyman, K. (2017). *Learning to diagnose from scratch by exploiting dependencies among labels.* <http://arxiv.org/abs/1710.10501>

Yopento, J., & Coastera, F. (2022). Identifikasi Pneumonia Pada Citra X-Ray Paru-Paru Menggunakan Metode Convolutional Neural Network (Cnn) Berdasarkan Ekstraksi Fitur Sobel. In *Jurnal Rekursif* (Vol. 10, Issue 1). <http://ejournal.unib.ac.id/index.php/rekursif/40>

Yudistira, N., Widodo, A. W., Rahayudi, B., & Korespondensi, P. (2020). Deteksi Covid-19 Pada Citra Sinar-X Dada Menggunakan Deep Learning Yang Efisien. 7(6), 1289–1296. <https://doi.org/10.25126/jtiik.202073651>

Yunus, N. R., & Rezki, A. (2020). Kebijakan Pemberlakuan Lock Down Sebagai Antisipasi Penyebaran Corona Virus Covid-19. SALAM: Jurnal Sosial Dan Budaya Syar-I, 7(3), 227-238.

Yuxi Dong, Yuchao Pan, J. Z. and W. X. (2017). *Learning to Read Chest X-Ray Images from 16000+ Examples Using CNN*. 96–96. <https://doi.org/10.1109/chase.2017.28>

Zhang, Y., & Mu, Z. (2017). *Ear Detection Under Uncontrolled Conditions With Multiple Scale Faster Region-Based Convolutional Neural Networks*. *Symmetry*, 9(4). <https://doi.org/10.3390/sym9040053>