

DAFTAR PUSTAKA

- Andika, J., Salamah, K.S. and Simarmata, L.M.S. (2020) 'Sistem Monitoring Serangan Berulang pada Penderita Penyakit Jantung menggunakan Panggilan dan Lokasi', *Jurnal Telekomunikasi dan Komputer*, 10(2), p. 77. Available at: <https://doi.org/10.22441/incomtech.v10i2.8445>.
- Brahmantyo, A. *et al.* (2023) 'Implementasi Filtrasi Sinyal Electrocardiogram (ECG) menggunakan metode Butterworth pada Android dengan Teknologi Edge Computing', 7(1), pp. 451–457.
- Bushnag, A. (2022) 'A Wireless ECG Monitoring and Analysis System Using the IoT Cloud', *Intelligent Automation and Soft Computing*, 33(1), pp. 51–70. Available at: <https://doi.org/10.32604/iasc.2022.024005>.
- Cao, X.C. *et al.* (2019) 'Combining translation-invariant wavelet frames and convolutional neural network for intelligent tool wear state identification', *Computers in Industry*, 106, pp. 71–84. Available at: <https://doi.org/10.1016/J.COMPIND.2018.12.018>.
- CH, R., S, N. and C, M. (2021) 'Ecg and Pulse Oxygen Level Monitoring and Arrhythmia Classification Using Cnn', *International Journal of Engineering Applied Sciences and Technology*, 6(8), pp. 171–176. Available at: <https://doi.org/10.33564/ijeast.2021.v06i08.028>.
- Dallalbashi, Z. and Dallalbashi, Z.E. (2020) *Digital filters are essential in the wider field of digital signal processing*, *IJCSNS International Journal of Computer Science and Network Security*. Available at: <https://www.researchgate.net/publication/343821701>.
- Estananto, N. (2018) 'Klasifikasi Sinyal Elektrokardiogram Menggunakan Renyi Entropy', *Jurnal Elektro dan Mesin Terapan*, 4(2), pp. 11–18. Available at: <https://doi.org/10.35143/elementer.v4i2.2139>.
- García-Escobar, A. *et al.* (2022) 'Subtle QRS changes are associated with reduced ejection fraction, diastolic dysfunction, and heart failure development and therapy responsiveness: Applications for artificial intelligence to ECG',

- Annals of Noninvasive Electrocardiology*, 27(6), pp. 1–12. Available at: <https://doi.org/10.1111/anec.12998>.
- Goldberger, A., Amaral, L., Glass, L., Hausdorff, J., Ivanov, P. C., Mark, R., ... & Stanley, H.E. (2000) *MIT-BIH Database v1.0.0*. Available at: <https://doi.org/https://doi.org/10.13026/C2MW2D>.
- Goldberger, A. L.; Amaral, L. A. N.; Glass, L.; Hausdorff, J. M.; Ivanov, P. C.; Mark, R. G.; Mietus, J. E.; Moody, G. B.; Peng, C.-K.; Stanley, H.E. (2000) 'PhysioBank, PhysioToolkit, and PhysioNet: Components of a new research resource for complex physiologic signals', *Circulation*, 101(23), pp. e215–e220. Available at: <https://doi.org/10.1161/01.CIR.101.23.e215>.
- Gunawan, D. and Setiawan, H. (2022) 'Convolutional Neural Network dalam Citra Medis', *KONSTELASI: Konvergensi Teknologi dan Sistem Informasi*, 2(2), pp. 376–390. Available at: <https://doi.org/10.24002/konstelasi.v2i2.5367>.
- Hannun, A.Y. *et al.* (2019) 'FOCUS | Letters FOCUS | Letters Cardiologist-level arrhythmia detection and classification in ambulatory electrocardiograms using a deep neural network Letters | FOCUS', *Nature Medicine*, 25(January). Available at: <https://doi.org/10.1038/s41591-018-0268-3>.
- Healey, J.S. *et al.* (2012) 'Subclinical Atrial Fibrillation and the Risk of Stroke', *New England Journal of Medicine*, 366(2), pp. 120–129. Available at: <https://doi.org/10.1056/nejmoa1105575>.
- Komputer, J.S., Komputer, F.I. and Sriwijaya, U. (2022) 'Implementasi Sistem Deteksi Atrial Fibrilasi Berbasis Komputasi Awan Menggunakan Metode Convolutional Neural Network'.
- Kumar, M. (2024) 'Design and Implementation of Digital Low Pass FIR and IIR Filters Using VHDL for ECG Denoising', *International Journal of Engineering Trends and Technology*, 72(1), pp. 252–265. Available at: <https://doi.org/10.14445/22315381/IJETT-V72I1P125>.
- Kuznetsova, N. *et al.* (2022) 'Left Ventricular Diastolic Dysfunction Screening by a Smartphone-Case Based on Single Lead ECG', *Clinical Medicine Insights: Cardiology*, 16. Available at: <https://doi.org/10.1177/11795468221120088>.
- Lee, J. *et al.* (2013) 'Atrial flutter and atrial tachycardia detection using Bayesian approach with high resolution time-frequency spectrum from ECG

- recordings', *Biomedical Signal Processing and Control*, 8(6), pp. 992–999. Available at: <https://doi.org/10.1016/j.bspc.2013.04.002>.
- Li, J. *et al.* (2017) 'Design of a Real-Time ECG Filter for Portable Mobile Medical Systems', *IEEE Access*, 5, pp. 696–704. Available at: <https://doi.org/10.1109/ACCESS.2016.2612222>.
- Lin, G.M. and Horng-Shing Lu, H. (2021) 'Electrocardiographic machine learning to predict left ventricular diastolic dysfunction in Asian young Male adults', *IEEE Access*, 9, pp. 49047–49054. Available at: <https://doi.org/10.1109/ACCESS.2021.3069232>.
- Lin, J. *et al.* (2021) 'MCUNetV2: Memory-Efficient Patch-based Inference for Tiny Deep Learning', *Advances in Neural Information Processing Systems*, 4, pp. 2346–2358.
- Lown, M. *et al.* (2020) 'Machine learning detection of atrial fibrillation using wearable technology', *PLoS ONE*, 15(1), pp. 1–9. Available at: <https://doi.org/10.1371/journal.pone.0227401>.
- Nguyen, T.N. *et al.* (2023) 'The Design and Construction of a 12-Channel Electrocardiogram Device Developed on an ADS1293 Chip Platform', *Electronics (Switzerland)*, 12(11). Available at: <https://doi.org/10.3390/electronics12112389>.
- Noviar, A. and Mukti, S. (2021) 'Klasifikasi Arritmia pada Sinyal EKG menggunakan Deep Neural Network', *Jupiter*, 13, pp. 29–38.
- Van Ommen, A.M. *et al.* (2021) 'Electrocardiographic Features of Left Ventricular Diastolic Dysfunction and Heart Failure With Preserved Ejection Fraction: A Systematic Review', *Frontiers in Cardiovascular Medicine*, 8(December). Available at: <https://doi.org/10.3389/fcvm.2021.772803>.
- Rafaqat, Saira *et al.* (2022) 'Electrolyte's imbalance role in atrial fibrillation: Pharmacological management', *International Journal of Arrhythmia*, 23(1). Available at: <https://doi.org/10.1186/s42444-022-00065-z>.
- Rahman, M.A., Samin, M.J.A. and Hasan, Z. Al (2020) 'Remote ECG monitoring and syncope detection system using deep learning', in *2020 2nd International Conference on Advanced Information and Communication Technology, ICAICT 2020*. Institute of Electrical and Electronics Engineers Inc., pp. 201–

206. Available at: <https://doi.org/10.1109/ICAICT51780.2020.9333490>.
- Reddy, S. *et al.* (2020) ‘Detection of Arrhythmia in Real-time using ECG Signal Analysis and Convolutional Neural Networks’, *Proceedings of 2020 IEEE 21st International Conference on Computational Problems of Electrical Engineering, CPEE 2020*, pp. 10–13. Available at: <https://doi.org/10.1109/CPEE50798.2020.9238743>.
- Reza, D.M. *et al.* (2023) ‘Jurnal Nasional Teknik Elektro Deep Learning Autoencoder Study on ECG Signals’, 3.
- Rifali, M. and Irmawati, D. (2019a) ‘Sistem Cerdas Deteksi Sinyal Elektrokardiogram (EKG) untuk Klasifikasi Jantung Normal dan Abnormal Menggunakan Jaringan Syaraf Tiruan (JST)’, *Elinvo (Electronics, Informatics, and Vocational Education)*, 4(1), pp. 49–55. Available at: <https://doi.org/10.21831/elinvo.v4i1.28242>.
- Rifali, M. and Irmawati, D. (2019b) ‘Sistem Cerdas Deteksi Sinyal Elektrokardiogram (EKG) untuk Klasifikasi Jantung Normal dan Abnormal Menggunakan Jaringan Syaraf Tiruan (JST)’, *Elinvo (Electronics, Informatics, and Vocational Education)*, 4(1), pp. 49–55. Available at: <https://doi.org/10.21831/elinvo.v4i1.28242>.
- Rippe, J.M. (2019) ‘Lifestyle Strategies for Risk Factor Reduction, Prevention, and Treatment of Cardiovascular Disease’, *American Journal of Lifestyle Medicine*, 13(2), pp. 204–212. Available at: <https://doi.org/10.1177/1559827618812395>.
- Satoto, H.H. (2014) ‘Patofisiologi Penyakit Jantung Koroner’, *JAI (Jurnal Anestesiologi Indonesia)*, 6(3), pp. 209–224. Available at: <https://doi.org/10.14710/jai.v6i3.9127>.
- Schreier, B.D. (2019) ‘Role of Red Blood Cells in Sickle Cell Disease and the Progression of Pulmonary Hypertension’.
- Takalo-Mattila, J., Kiljander, J. and Soininen, J.P. (2018a) ‘Inter-patient ECG classification using deep convolutional neural networks’, *Proceedings - 21st Euromicro Conference on Digital System Design, DSD 2018*, pp. 421–425. Available at: <https://doi.org/10.1109/DSD.2018.00077>.
- Takalo-Mattila, J., Kiljander, J. and Soininen, J.P. (2018b) ‘Inter-patient ECG

- classification using deep convolutional neural networks’, in *Proceedings - 21st Euromicro Conference on Digital System Design, DSD 2018*. Institute of Electrical and Electronics Engineers Inc., pp. 421–425. Available at: <https://doi.org/10.1109/DSD.2018.00077>.
- Umbu, A.B.S. (2023) ‘DESAIN BAND PASS FILTER DENGAN FREKUENSI CUT-OFF 1 KHz DAN 100 KHz UNTUK SISTEM ELECTRICAL IMPEDANCE TOMOGRAPHY (EIT)’, *ORBITA: Jurnal Pendidikan dan Ilmu Fisika*, 9(1), p. 58. Available at: <https://doi.org/10.31764/orbita.v9i1.13947>.
- Wasimuddin, M. *et al.* (2020) ‘Stages-based ECG signal analysis from traditional signal processing to machine learning approaches: A survey’, *IEEE Access*, 8, pp. 177782–177803. Available at: <https://doi.org/10.1109/ACCESS.2020.3026968>.
- Wicaksono, M.A., Fuadah, Y.N. and Rustam (2022) ‘Sistem Deteksi Atrial Fibrillation Menggunakan Metode Convolutional Neural Network (CNN) 1-Dimensi’, *e-Proceeding of Engineering*, 8(6), pp. 3927–3931.
- Xi, Z. and Chen, J. (2020) ‘New Nonlinear Signal Processing Method Based on LS Algorithm and Decision Feedback at Receiver’, pp. 235–239.
- Yao, G. *et al.* (2021) ‘Interpretation of Electrocardiogram Heartbeat by CNN and GRU’, 2021. Available at: <https://doi.org/10.1155/2021/6534942>.
- Yeh, L.R. *et al.* (2021) ‘Integrating ECG monitoring and classification via iot and deep neural networks’, *Biosensors*, 11(6), pp. 1–12. Available at: <https://doi.org/10.3390/bios11060188>.