

DAFTAR PUSTAKA

- Ahmed, A.A. *et al.* (2023) ‘Classifying Cardiac Arrhythmia from ECG Signal Using 1D CNN Deep Learning Model’, *Mathematics*, 11(3), p. 562. Available at: <https://doi.org/10.3390/math11030562>.
- Al-Adhaileh, M.H. *et al.* (2023) ‘Potato Blight Detection Using Fine-Tuned CNN Architecture’, *Mathematics*, 11(6), p. 1516. Available at: <https://doi.org/10.3390/math11061516>.
- Anugrah, D. (2019) ‘Rancang Bangun Pengukur Laju Detak Jantung Berbasis PLC Mikro’, *Elinvo (Electronics, Informatics, and Vocational Education)*, 1(3), pp. 163–170. Available at: <https://doi.org/10.21831/elinvo.v1i3.10857>.
- Bae, T.W. and Kwon, K.K. (2019a) ‘Efficient real-time R and QRS detection method using a pair of derivative filters and max filter for portable ECG device’, *Applied Sciences (Switzerland)*, 9(19). Available at: <https://doi.org/10.3390/app9194128>.
- Bae, T.W. and Kwon, K.K. (2019b) ‘Efficient real-time R and QRS detection method using a pair of derivative filters and max filter for portable ECG device’, *Applied Sciences (Switzerland)*, 9(19). Available at: <https://doi.org/10.3390/app9194128>.
- Buendía-Fuentes, F. *et al.* (2012) ‘High-Bandpass Filters in Electrocardiography: Source of Error in the Interpretation of the ST Segment’, *ISRN Cardiology*, 2012, pp. 1–10. Available at: <https://doi.org/10.5402/2012/706217>.
- Bui, N.T. *et al.* (2020) ‘Real-Time Filtering and ECG Signal Processing Based on Dual-Core Digital Signal Controller System’, *IEEE Sensors Journal*, 20(12), pp. 6492–6503. Available at: <https://doi.org/10.1109/JSEN.2020.2975006>.
- Cammarota, G. *et al.* (2023) ‘Advanced Point-of-care Bedside Monitoring for Acute Respiratory Failure’, *Anesthesiology*. Lippincott Williams and Wilkins, pp. 317–334. Available at: <https://doi.org/10.1097/ALN.0000000000004480>.
- Chang, X. *et al.* (2019) ‘DeepHeart: Accurate heart rate estimation from PPG signals based on deep learning’, in *Proceedings - 2019 IEEE 16th International Conference on Mobile Ad Hoc and Smart Systems, MASS 2019*. Institute of Electrical and Electronics Engineers Inc., pp. 371–379. Available at: <https://doi.org/10.1109/MASS.2019.00051>.
- Das, N. and Chakraborty, M. (2017) ‘Performance analysis of FIR and IIR filters for ECG signal denoising based on SNR’, in *2017 Third International Conference on Research in Computational Intelligence and Communication Networks (ICRCICN)*. IEEE, pp. 90–97. Available at: <https://doi.org/10.1109/ICRCICN.2017.8234487>.

Davoudi, A. *et al.* (2019) ‘Intelligent ICU for Autonomous Patient Monitoring Using Pervasive Sensing and Deep Learning’, *Scientific Reports*, 9(1). Available at: <https://doi.org/10.1038/s41598-019-44004-w>.

Dhillon, A. and Verma, G.K. (2020) ‘Convolutional neural network: a review of models, methodologies and applications to object detection’, *Progress in Artificial Intelligence*, 9(2), pp. 85–112. Available at: <https://doi.org/10.1007/s13748-019-00203-0>.

Durđe, P. and Bojović, M. (no date) *INFINITE IMPULSE RESPONSE DIGITAL FILTER FOR PULSE SIGNAL PERIODS*.

Elektro, T., Negeri, M. and Belitung, B. (2016) ‘ALAT PENDETEKSI DENYUT NADI BERBASIS ARDUINO YANG DIINTERFACEKAN KE KOMPUTER Eko Sulistyó’, (November 2016), pp. 8–11.

Fathail, I. and Bhagile, V.D. (2022) ‘ECG Paper Digitization and R Peaks Detection Using FFT’, *Applied Computational Intelligence and Soft Computing*, 2022. Available at: <https://doi.org/10.1155/2022/1238864>.

Field, M.J. (2022) ‘Telemedicine and Remote Patient Monitoring’, *JAMA*, 288(4), p. 423. Available at: <https://doi.org/10.1001/jama.288.4.423>.

Filho, I.D.M.B. *et al.* (2021) ‘An IoT-Based Healthcare Platform for Patients in ICU Beds during the COVID-19 Outbreak’, *IEEE Access*, 9, pp. 27262–27277. Available at: <https://doi.org/10.1109/ACCESS.2021.3058448>.

Fortmann, A.L. *et al.* (2020) ‘Glucose as the fifth vital sign: A randomized controlled trial of continuous glucose monitoring in a non-ICU hospital setting’, *Diabetes Care*, 43(11), pp. 2873–2877. Available at: <https://doi.org/10.2337/dc20-1016>.

Francis, J. (2016) ‘ECG monitoring leads and special leads’, *Indian Pacing and Electrophysiology Journal*, 16(3), pp. 92–95. Available at: <https://doi.org/10.1016/j.ipej.2016.07.003>.

Gopal, S. *et al.* (2012) *PERFORMANCE ANALYSIS OF FIR DIGITAL FILTER DESIGN TECHNIQUES*. Available at: <http://www.ijccr.com>.

Guendouzi, F. and Attari, M. (2022) ‘QRS Complex Detection in ECG Signals Using Empirical Wavelet Transform and Flower Pollination Algorithm’, *Periodica polytechnica Electrical engineering and computer science*, 66(4), pp. 380–390. Available at: <https://doi.org/10.3311/PPEe.20535>.

Gupta, V., Mittal, M. and Mittal, V. (2019) ‘R-Peak Detection Using Chaos Analysis in Standard and Real Time ECG Databases’, *IRBM*, 40(6), pp. 341–354. Available at: <https://doi.org/10.1016/j.irbm.2019.10.001>.

Hammad, M. *et al.* (2019) 'Detection of abnormal heart conditions based on characteristics of ECG signals', *Measurement: Journal of the International Measurement Confederation*, 125, pp. 634–644. Available at: <https://doi.org/10.1016/j.measurement.2018.05.033>.

Hasrifah, H. *et al.* (2023) 'Effectiveness Analysis of Infinite Impulse Response Digital Filter on Electrocardiogram Signal to Extract Respiration Rate Signal', in, pp. 633–655. Available at: https://doi.org/10.1007/978-981-99-0248-4_41.

Hossain, M.B. *et al.* (2019) 'An Accurate QRS Complex and P Wave Detection in ECG Signals Using Complete Ensemble Empirical Mode Decomposition with Adaptive Noise Approach', *IEEE Access*, 7, pp. 128869–128880. Available at: <https://doi.org/10.1109/ACCESS.2019.2939943>.

Ishmah, Y.N. *et al.* (2022) *EVALUASI SADAPAN PREKORDIAL ECG SAFONE DARI ASPEK TEKNOLOGI*, *Riau Nursing Journal*.

Jiao, J. *et al.* (2020) 'A comprehensive review on convolutional neural network in machine fault diagnosis', *Neurocomputing*, 417, pp. 36–63. Available at: <https://doi.org/10.1016/j.neucom.2020.07.088>.

Kumar, A. *et al.* (2019) 'Efficient QRS complex detection algorithm based on Fast Fourier Transform', *Biomedical Engineering Letters*, 9(1), pp. 145–151. Available at: <https://doi.org/10.1007/s13534-018-0087-y>.

Manisha, Dhull, S.Kr. and Singh, K.K. (2020) 'ECG Beat Classifiers: A Journey from ANN To DNN', *Procedia Computer Science*, 167, pp. 747–759. Available at: <https://doi.org/10.1016/j.procs.2020.03.340>.

Manlong, N.A., Rahul, J. and Sora, M. (2018) 'ST Segment Analysis for Early Detection of Myocardial Infarction', *International Journal of Computer Sciences and Engineering*, 6(6), pp. 1500–1504. Available at: <https://doi.org/10.26438/ijcse/v6i6.15001504>.

Mao, R. *et al.* (2022) 'An Ultra-Energy-Efficient and High Accuracy ECG Classification Processor With SNN Inference Assisted by On-Chip ANN Learning', *IEEE Transactions on Biomedical Circuits and Systems*, 16(5), pp. 832–841. Available at: <https://doi.org/10.1109/TBCAS.2022.3185720>.

Murugan, S., Selvaraj, J. and Sahayadhas, A. (2020) 'Detection and analysis: driver state with electrocardiogram (ECG)', *Physical and Engineering Sciences in Medicine*, 43(2), pp. 525–537. Available at: <https://doi.org/10.1007/s13246-020-00853-8>.

Prayogo, I., Alfita, R. and Wibisono, K.A. (2017) 'Monitoring System for Heart Rate and Body Temperature as an IOT (Internet Of Thing)-Based Patient Health Level Indicator Using the Fuzzy Logic Method Using Android', *Journal of Electrical and Computer Engineering TRIAC*, 4(2).

R. F. Putri Madona (2021) 'Akuisisi Sinyal Electrocardiography (ECG) Berbasis Arduino', vol.7no.1, pp. 35–46.

Saini, S.K. and Gupta, R. (2022) 'Artificial intelligence methods for analysis of electrocardiogram signals for cardiac abnormalities: state-of-the-art and future challenges', *Artificial Intelligence Review*, 55(2), pp. 1519–1565. Available at: <https://doi.org/10.1007/s10462-021-09999-7>.

Sebagai Salah Satu Syarat untuk Mencapai Gelar, S. and Jurusan Fisika Fakultas Matematika dan Ilmu Pengetahuan Alam, P. (2020) *RANCANG BANGUN PENGUAT BIOPOTENSIAL ELEKTROKARDIOGRAFI (EKG) BERBASIS IC AD620 IMAM NASIQIN*.

Shikder Shafiul Basha and Md. Sazal Miah (2019) *2019 4th International Conference on Electrical Information and Communication Technology (EICT)*. IEEE.

Slavova, A. and Tetzlaff, R. (2020) 'Edge of chaos in reaction diffusion CNN model', *Open Mathematics*, 15(1), pp. 21–29. Available at: <https://doi.org/10.1515/math-2017-0002>.

Subramanian, K. and Prakash, N.K. (2020) 'Machine learning based cardiac arrhythmia detection from ECG signal', in *Proceedings of the 3rd International Conference on Smart Systems and Inventive Technology, ICSSIT 2020*. Institute of Electrical and Electronics Engineers Inc., pp. 1137–1141. Available at: <https://doi.org/10.1109/ICSSIT48917.2020.9214077>.

Takahashi, D. (2019) 'Fast Fourier Transform', in, pp. 5–13. Available at: https://doi.org/10.1007/978-981-13-9965-7_2.

Tiwari, R. *et al.* (2021) 'Analysis of Heart Rate Variability and Implication of Different Factors on Heart Rate Variability', *Current Cardiology Reviews*, 17(5). Available at: <https://doi.org/10.2174/1573403x16999201231203854>.

Tsai, Y.-C. *et al.* (2020) 'High Accuracy Respiration and Heart Rate Detection Based on Artificial Neural Network Regression', in *2020 42nd Annual International Conference of the IEEE Engineering in Medicine & Biology Society (EMBC)*. IEEE, pp. 232–235. Available at: <https://doi.org/10.1109/EMBC44109.2020.9175161>.

Usman, M. *et al.* (2021) 'Heart rate detection and classification from speech spectral features using machine learning', *Archives of Acoustics*, 46(1), pp. 41–53. Available at: <https://doi.org/10.24425/aoa.2021.136559>.

Zazirah, A. *et al.* (2022) *EVALUASI SADAPAN PRECORDIAL ECG SafOne DARI ASPEK DESAIN*, *Riau Nursing Journal*.