[14] T.-H. Chen, Y. Zheng, L.-Q. Han, P.-Y. Guo, and X.-Y. He, "The Sorting Method of ECG Signals Based on Neural Network," *Proc. Int. Conf. on Bioinform. and Biomed. Eng.*, 2008, pp. 543-546.

[15] H.M. Rai and A. Trivedi, "ECG Signal Classification Using Wavelet Transform and Back Propagation Neural Network," *Proc. 5th Int. Conf. on Comput. and Dev. for Commun.*, 2012, pp. 1-4.

[16] V. Seena and J. Yomas, "A Review on Feature Extraction and Denoising of ECG Signal Using Wavelet Transform," *Proc. 2nd Int. Conf. on Devices, Circ. and Syst.*, 2014, pp.1-6.

[17] M.H.F.M. Jalil, M.F. Saaid, A. Ahmad, and M.S.A.M. Ali, "Arrhythmia Modeling via ECG Characteristic Frequencies and Artificial Neural Network," *Proc. 2014 IEEE Conf. on Syst., Process, and Control (ICSPC 2014)*, 2014, pp. 121-126.

[18] K.J. Chen and P. Chien, "A Fast ECG Diagnosis Using Frequency-based Compressive Neural Network," *Proc. 2017 IEEE 6th Glob. Conf. on Consum. Electron. (GCCE)*, 2017, pp. 3–4.

[19] F. Karim, S. Majumdar, H. Darabi, and S. Chen, "LSTM Fully Convolutional Networks for Time Series Classification," *IEEE Access*, Vol. 6, pp. 1662-1669, 2018.

[20] J.J. Siang, *Jaringan Syaraf Tiruan dan Pemrogramannya Menggunakan Matlab*, Yogyakarta, Indonesia: ANDI OFFSET, 2005.

[21] A. Hidaka and T. Kurita, "Consecutive Dimensionality Reduction by Canonical Correlation Analysis for Visualization of Convolutional Neural Networks," *Proc. of the ISCIE Int. Symp. on Stoch. Syst. Theory and Its Appl.*, 2017, pp. 160-167.

[22] A. Rajkumar, M. Ganesan, and R. Lavanya, "Arrhythmia Classification on ECG Using Deep Learning," *2019 5th Int. Conf. on Adv. Comp. & Commun. Syst. (ICACCS)*, 2019, pp. 365-369.

[23] S. Savalia and V. Emamian. "Cardiac Arrhythmia Classification by Multi-Layer Perceptron and Convolution Neural Networks," *Bioengineering*, Vol. 5, No. 2, pp. 1-12, 2018.

[24] F. Liu, X. Zhou, J. Cao, Z. Wang, H. Wang, and Y. Zhang, "A LSTM and CNN Based Assemble Neural Network Framework for Arrhythmias Classification," *Proc. 2019 IEEE Int. Conf. on Acoust., Speech and Sign. Proces. (ICASSP)*, 2019, pp. 1303-1307.

[25] S. Kiranyaz, T. Ince, and M. Gabbouj, "Real-time Patient-specific ECG Classification by 1-D Convolutional Neural Networks," *IEEE Trans. Biomed. Eng.*, Vol. 63, No. 3, pp. 664–675, 2016.

[26] S. Saadatnejad, M. Oveisi, and M. Hashemi, "LSTM-Based ECG Classification for Continuous Monitoring on Personal Wearable Devices," *IEEE J. of Biomed. and Health Inform.*, Vol. 24, No. 2, pp. 515-523, Feb. 2020.

[27] A. Amirshahi and M. Hashemi, "ECG Classification Algorithm Based on STDP and R-STDP Neural Networks for Real-time Monitoring on Ultra Low-Power Personal Wearable Devices," *IEEE Trans. Biomedi. Circ. and Syst. (TBioCAS)*, Vol. 13, No. 6, pp. 1483-1493, Dec. 2019.

[28] B. Pourbabaee, M.J. Roshtkhari, and K. Khorasani, "Deep Convolutional Neural Networks and Learning ECG Features for Screening Paroxysmal Atrial Fibrillation Patients," *IEEE Tran. on Syst., Man, and Cybernetics: Systems*, Vol. 48, No. 12, pp. 2095-2104, Dec. 2018.

[29] E. Al-masri, "Detecting ECG Heartbeat Abnormalities Using Artificial Neural Networks," *Proc. IEEE Int. Conf. on Big Data*, 2018, pp. 5279-5281.

[30] J. Huang, B. Chen, B. Yao, and W. He, "ECG Arrhythmia Classification Using STFT-Based Spectrogram and Convolutional Neural Network," *IEEE Access*, Vol. 7, pp. 92871-92880, 2019.

[31] X. Xu, S. Jeong, and J. Li, "Interpretation of Electrocardiogram (ECG) Rhythm by Combined CNN and BiLSTM," *IEEE Access*, Vol. 8, pp. 125380-125388, 2020.

[32] A. Rana and K.K. Kim, "ECG Heartbeat Classification Using a Single Layer LSTM Model," *Proc. 2019 Int. SoC Design Conf. (ISOCC)*, 2019, pp. 267-268.

[33] R. Banerjee, A. Ghose, and K.M. Mandana, "A Hybrid CNN-LSTM Architecture for Detection of Coronary Artery Disease from ECG," *Proc. 2020 Int. Joint Conf. on Neural Networks (IJCNN)*, 2020, pp. 1-8.