

DAFTAR PUSTAKA

- [1] X. Han, “Infrared Remote Control Design Based On Single Chip Microcomputer,” dalam *2015 IEEE International Conference on Computer and Communications (ICCC)*, Chengdu, China, Okt 2015, hlm. 245–249. doi: 10.1109/CompComm.2015.7387575.
- [2] S. Dey dan A. Roy, “Home Automation Using Internet of Thing,” *2016 IEEE 7th Annu. Ubiquitous Comput. Electron. Mob. Commun. Conf. UEMCON*, Des 2016, doi: 10.1109/UEMCON.2016.7777826.
- [3] O. Starkova, K. Herasymenko, dan Y. Babailova, “Remote Control Systems of Household Appliances,” *2017 4th Int. Sci.-Pract. Conf. Probl. Infocommunications Sci. Technol. PIC ST*, hlm. 585–588, Jan 2018, doi: 10.1109/INFOCOMMST.2017.8246468.
- [4] K.-M. Lee, W.-G. Teng, dan T.-W. Hou, “Point-n-Press: An Intelligent Universal Remote Control System for Home Appliances,” *IEEE Trans. Autom. Sci. Eng.*, vol. 13, no. 3, hlm. 1308–1317, Jul 2016, doi: 10.1109/TASE.2016.2539381.
- [5] M. Schiefer, “Smart Home Definition and Security Threats,” dalam *2015 Ninth International Conference on IT Security Incident Management & IT Forensics*, Magdeburg, Germany: IEEE, Mei 2015, hlm. 114–118. doi: 10.1109/IMF.2015.17.
- [6] N. H. Tandel, H. B. Prajapati, dan V. K. Dabhi, “Speech recognition and Voice Comparison using Machine Learning Techniques: A Survey,” dalam *2020 6th International Conference on Advanced Computing and*

- Communication Systems (ICACCS)*, Coimbatore, India, Mar 2020, hlm. 459–465. doi: 10.1109/ICACCS48705.2020.9074184.
- [7] M. N. A. Aadit, S. G. Kirtania, dan M. T. Mahin, “Suppression of white and colored noise in Bangla speech using Kalman filter,” dalam *2016 3rd International Conference on Electrical Engineering and Information Communication Technology (ICEEICT)*, Dhaka, Bangladesh: IEEE, Sep 2016, hlm. 1–6. doi: 10.1109/CEEICT.2016.7873174.
 - [8] A. Cornel - Cristian, T. Gabriel, M. Arhip-Calin, dan A. Zamfirescu, “Smart home automation with MQTT,” dalam *2019 54th International Universities Power Engineering Conference (UPEC)*, Bucharest, Romania: IEEE, Sep 2019, hlm. 1–5. doi: 10.1109/UPEC.2019.8893617.
 - [9] A. Z. Hasibuan, M. S. Asih, dan Y. F. Nasution, “Remote Infrared Multifungsi untuk Pengendali Projektor dan Ac Berbasis Mikrokontroler,” *Semin. Nas. Teknol. Inf. Komun. 2020*, vol. 1, no. 1, hlm. 106–113, 2020.
 - [10] S. Nazir dan M. Kaleem, “Reliable Image Notifications for Smart Home Security with MQTT,” dalam *2019 International Conference on Information Science and Communication Technology (ICISCT)*, Karachi, Pakistan: IEEE, Mar 2019, hlm. 1–5. doi: 10.1109/CISCT.2019.8777403.
 - [11] N. A. Jafar, “Sistem Pembelajaran untuk Penyandang Disabilitas Berbasis Sinyal Wicara Menggunakan Matlab,” *Telekontran J. Ilm. Telekomun. Kendali Dan Elektron. Terap. Universitas Komputer Indonesia*, vol. 8, no. 2, hlm. 123–129, Apr 2021, doi: 10.34010/telekontran.v8i2.4574.
 - [12] O. Tymchenko, B. Havrysh, O. O. Tymchenko, O. Khamula, B. Kovalskyi, dan K. Havrysh, “Person *Speech recognition* Methods,” dalam *2020 IEEE*

Third International Conference on Data Stream Mining & Processing (DSMP), Lviv, Ukraine, Agu 2020, hlm. 287–290. doi: 10.1109/DSMP47368.2020.9204023.

- [13] B. Fan, H. Song, M. Liu, dan Y. Wang, “The improvement and realization of speech enhancement algorithm based on Wiener filtering,” dalam *2015 8th International Congress on Image and Signal Processing (CISP)*, Shenyang, China: IEEE, Okt 2015, hlm. 1116–1120. doi: 10.1109/CISP.2015.7408047.
- [14] H. Mukhsin dan B. Yulianti, “Remote Control Berbasis Internet of Things (IoT),” dalam *Prosiding Seminar Nasional Sains Teknologi dan Inovasi Indonesia*. volume 3, Tahun 2021, hlm. 157-168.
- [15] B. E. Purnama, ”Perancangan Sistem Perangkat Keras Dan Perangkat Lunak Pengendali Komputer Jarak Jauh Menggunakan Sinar Infra Merah,” dalam *Seminar Nasional Aplikasi Teknologi Informasi 2006*.
- [16] J. Dvorak, O. Krejcar, dan L. K. Cheng, “Application of universal remote control of non-smart home appliances for smart home concepts,” *Int J Digit. Enterp. Technol.*, vol. 1, no. 3, 2019.
- [17] V. Pandey, “Equiripple bandpass FIR filter design for speech signals: Order optimization for frequency range of 300 Hz to 4000 Hz,” dalam *International Conference on Computing, Communication & Automation*, Greater Noida, India: IEEE, Mei 2015, hlm. 1368–1371. doi: 10.1109/CCAA.2015.7148592.
- [18] M. Algabri, M. Alsulaiman, G. Muhammad, M. Zakariah, dan Z. Ali, “Voice and Unvoiced Classification Using Fuzzy Logic”.

- [19] B. M. S. Rani, A. J. Rani, T. Ravi, dan M. D. Sree, “Basic Fundamental Recognition of Voiced Unvoiced and Silence Region of A Speech,” vol. 4, no. 2.
- [20] R. Masumura, T. Asami, T. Oba, dan S. Sakauchi, “Hierarchical Latent Words Language Models for Automatic Speech Recognition,” *J. Inf. Process.*, vol. 29, no. 0, hlm. 360–369, 2021, doi: 10.2197/ipsjjip.29.360.
- [21] M. Humayun, R. Sujatha, S. N. Almuayqil, dan N. Z. Jhanjhi, “A Transfer Learning Approach with a Convolutional Neural Network for the Classification of Lung Carcinoma,” *Healthcare*, vol. 10, no. 6, hlm. 1058, Jun 2022, doi: 10.3390/healthcare10061058.
- [22] Y. Feng, N. Hu, dan X. Yu, “Neural Network-Based Ultra-High-Definition Video Live Streaming Optimization Algorithm,” *Wirel. Commun. Mob. Comput.*, vol. 2022, hlm. 1–10, Apr 2022, doi: 10.1155/2022/2509209.
- [23] “Convolutional Neural Network,” *How CNNs Work*. <https://www.mathworks.com/discovery/convolutional-neural-network-matlab.html> (diakses 19 Juni 2023).
- [24] T. Sledovic, “Adaptation of Convolution and Batch Normalization Layer for CNN Implementation on FPGA,” dalam *2019 Open Conference of Electrical, Electronic and Information Sciences (eStream)*, Vilnius, Lithuania: IEEE, Apr 2019, hlm. 1–4. doi: 10.1109/eStream.2019.8732160.
- [25] H. Ide dan T. Kurita, “Improvement of learning for CNN with ReLU activation by sparse regularization,” dalam *2017 International Joint Conference on Neural Networks (IJCNN)*, Anchorage, AK, USA: IEEE, Mei 2017, hlm. 2684–2691. doi: 10.1109/IJCNN.2017.7966185.

- [26] E. A. Mohamed, T. Gaber, O. Karam, dan E. A. Rashed, “A Novel CNN pooling layer for breast cancer segmentation and classification from thermograms,” *PLOS ONE*, vol. 17, no. 10, hlm. e0276523, Okt 2022, doi: 10.1371/journal.pone.0276523.
- [27] S. Sultana, M. Z. Iqbal, M. R. Selim, Md. M. Rashid, dan M. S. Rahman, “Bangla Speech Emotion Recognition and Cross-Lingual Study Using Deep CNN and BLSTM Networks,” *IEEE Access*, vol. 10, hlm. 564–578, 2022, doi: 10.1109/ACCESS.2021.3136251.
- [28] P. Dileep, D. Das, dan P. K. Bora, “Dense Layer Dropout Based CNN Architecture for Automatic Modulation Classification,” dalam *2020 National Conference on Communications (NCC)*, Kharagpur, India: IEEE, Feb 2020, hlm. 1–5. doi: 10.1109/NCC48643.2020.9055989.
- [29] X. Ding, C. Xia, X. Zhang, X. Chu, J. Han, dan G. Ding, “RepMLP: Re-parameterizing Convolutions into Fully-connected Layers for Image Recognition.” arXiv, 30 Maret 2022. Diakses: 19 Juni 2023. [Daring]. Tersedia pada: <http://arxiv.org/abs/2105.01883>
- [30] Nishith Choudhary, N. Agarwal, dan S. Sonawane, “A Comparative Study of Support Vector Machine and Convolutional Neural Network with Softmax Layer Configuration,” Mar 2020, doi: 10.5281/ZENODO.3712022.
- [31] V. Rabila dan G. B. Sreeja, “International Journal of Scientific Research in Computer Science, Engineering and Information Technology,” *Int. J. Sci. Res. Comput. Sci. Eng. Inf. Technol.*, vol. 2, no. 2, hlm. 176–178, Mar 2017.
- [32] S. Sakamoto, S. Hongo, T. Okamoto, Y. Iwaya, dan Y. Suzuki, “Sound-space recording and binaural presentation system based on a 252-channel

- microphone array,” *Acoust. Sci. Technol.*, vol. 36, no. 6, hlm. 516–526, 2015, doi: 10.1250/ast.36.516.
- [33] A. Carullo, A. Penna, A. Vallan, A. Astolfi, L. Pavese, dan G. E. Puglisi, “Traceability and uncertainty of vocal parameters estimated through a contact microphone,” dalam *2014 IEEE International Symposium on Medical Measurements and Applications (MeMeA)*, Lisboa, Portugal: IEEE, Jun 2014, hlm. 1–6. doi: 10.1109/MeMeA.2014.6860128.
- [34] A. Alzahrani dan T. H. H. Aldhyani, “Artificial Intelligence Algorithms for Detecting and Classifying MQTT Protocol Internet of Things Attacks,” *Electronics*, vol. 11, no. 22, hlm. 3837, Nov 2022, doi: 10.3390/electronics11223837.
- [35] M. B. Yassein, M. Q. Shatnawi, S. Aljwarneh, dan R. Al-Hatmi, “Internet of Things: Survey and open issues of MQTT protocol,” dalam *2017 International Conference on Engineering & MIS (ICEMIS)*, Monastir: IEEE, Mei 2017, hlm. 1–6. doi: 10.1109/ICEMIS.2017.8273112.
- [36] R. Funatsu, H. Masuda, S. Nakamura, T. Yamashita, dan H. Shimamoto, “High-visibility focus-aid signal for ultra-high-definition television cameras using maximum value filter with sparse noise reduction,” dalam *2016 IEEE International Symposium on Broadband Multimedia Systems and Broadcasting (BMSB)*, Nara, Japan: IEEE, Jun 2016, hlm. 1–6. doi: 10.1109/BMSB.2016.7521927.
- [37] A. B. Husein, “Sistem Pengendalian Prostetik Tangan Robotik Melalui Pendeksiian Sinyal EMG,” Thesis, Universitas Komputer Indonesia,

- Bandung, Jawa Barat, 2015. Diakses: 11 Juni 2023. [Daring]. Tersedia pada:
https://elib.unikom.ac.id/download.php?id=308377_36
- [38] Anshul dan K. Rathi, “Comparison of various window techniques for design FIR digital filter,” dalam *2017 IEEE International Conference on Power, Control, Signals and Instrumentation Engineering (ICPCSI)*, Chennai: IEEE, Sep 2017, hlm. 428–432. doi: 10.1109/ICPCSI.2017.8392331.
- [39] Weimich, “Digital Signal Processing and Software,” *FIR Filter Implementation Using Octave GNU Tool and C Language*. <https://www.dsp-weimich.com/digital-signal-processing/fir-filters-implementation-using-octave-gnu-tool-and-c-language/> (diakses 12 Juni 2023).
- [40] Shawn, “Shawn’s DSP Tutorials on practical aspects of digital signal processing,” *Implementation of FIR Filtering in C (Part I)*. <https://sestevenson.wordpress.com/implementation-of-fir-filtering-in-c-part-1/> (diakses 12 Juni 2023).
- [41] S. Sarpal, “ALGORITHMS, ASN FILTER DESIGNER, ASN FILTER DESIGNER FUNCTIONALITY,” *Difference between IIR and FIR filters: a practical design guide*, 28 April 2020. <https://www.advsolned.com/difference-between-iir-and-fir-filters-a-practical-design-guide/> (diakses 12 Juni 2023).
- [42] J. Vittal Rao, “Difference Between FIR Filter and IIR Filter,” *Content: FIR Vs IIR Filter*, 6 Desember 2020. <https://circuitglobe.com/difference-between-fir-filter-and-iir-filter.html> (diakses 13 Juni 2023).

- [43] “Design of FIR Filters”, Diakses: 13 Juli 2023. [Daring]. Tersedia pada: <http://www2.ensc.sfu.ca/people/faculty/ho/ENSC429/Chapter%205%20-%20Design%20of%20FIR%20Filters.pdf>
- [44] M. Rhif, A. Ben Abbes, I. Farah, B. Martínez, dan Y. Sang, “Wavelet Transform Application for/in Non-Stationary Time-Series Analysis: A Review,” *Appl. Sci.*, vol. 9, no. 7, hlm. 1345, Mar 2019, doi: 10.3390/app9071345.
- [45] S. Lee, S.-S. Wang, Y. Tsao, dan J. Hung, “Speech Enhancement Based on Reducing the Detail Portion of Speech Spectrograms in Modulation Domain via Discrete Wavelet Transform.” arXiv, 8 November 2018. Diakses: 14 Juli 2023. [Daring]. Tersedia pada: <http://arxiv.org/abs/1811.03486>
- [46] N. Dewangan dan A. D. Goswami, “Adaptive Wavelet Thresholding for Image Denoising Using Various Shrinkage Under Different Noise.
- [47] S. Maqbool dan M. Arif, “IoT Based Remote Patient Monitoring System,” dalam *seminar International Conferenceon Decision Aid Sciences and Application*, DASA 2020.