

## DAFTAR PUSTAKA

- [1] W. Tigra *et al.*, “A Novel EMG Interface for Individuals with Tetraplegia to Pilot Robot Hand Grasping,” *IEEE Trans. Neural Syst. Rehabil. Eng.*, vol. 26, no. 2, pp. 291–298, 2018, doi: 10.1109/TNSRE.2016.2609478.
- [2] G. Jang, J. Kim, S. Lee, Y. Choi, and S. Member, “EMG-Based Continuous Control Scheme with Simple Classifier for Electric-Powered Wheelchair,” vol. 0046, no. c, pp. 1–11, 2016, doi: 10.1109/TIE.2016.2522385.
- [3] Y. Maeda and S. Ishibashi, “Operating instruction method based on EMG for omnidirectional wheelchair robot,” *IFSA-SCIS 2017 - Jt. 17th World Congr. Int. Fuzzy Syst. Assoc. 9th Int. Conf. Soft Comput. Intell. Syst.*, 2017, doi: 10.1109/IFSA-SCIS.2017.8023339.
- [4] S. R. Dubowsky and P. V. Way, “Comparison of Kinematics , Kinetics , and EMG Throughout Wheelchair Propulsion in Able-Bodied and Persons With Paraplegia : An Integrative,” vol. 131, no. February 2009, pp. 1–8, 2016, doi: 10.1115/1.2900726.

- [5] N. Louis and P. Gorce, "Clinical Biomechanics Surface electromyography activity of upper limb muscle during wheelchair propulsion: Influence of wheelchair configuration," *JCLB*, vol. 25, no. 9, pp. 879–885, 2010, doi: 10.1016/j.clinbiomech.2010.07.002.
- [6] M. F. Ruzaij, S. Neubert, N. Stoll, and K. Thurow, "Multi-sensor robotic-wheelchair controller for handicap and quadriplegia patients using embedded technologies," *Proc. - 2016 9th Int. Conf. Hum. Syst. Interact. HSI 2016*, pp. 103–109, 2016, doi: 10.1109/HSI.2016.7529616.
- [7] S. R. Avutu, D. Bhatia, and B. Venkateswara Reddy, "Voice control module for low cost local-map navigation based intelligent wheelchair," *Proc. - 7th IEEE Int. Adv. Comput. Conf. IACC 2017*, pp. 609–613, 2017, doi: 10.1109/IACC.2017.0129.
- [8] N. Aktar, I. Jaharr, and B. Lala, "Voice Recognition based intelligent Wheelchair and GPS Tracking System," *2nd Int. Conf. Electr. Comput. Commun. Eng. ECCE 2019*, pp. 7–9, 2019, doi: 10.1109/ECACE.2019.8679163.
- [9] S. Umchid, P. Limhaprasert, S. Chumsoongnern, T.

- Petthong, and T. Leeudomwong, "Voice Controlled Automatic Wheelchair," *BMEiCON 2018 - 11th Biomed. Eng. Int. Conf.*, pp. 1–5, 2019, doi: 10.1109/BMEiCON.2018.8609955.
- [10] D. Wang and H. Yu, "Development of the control system of a voice-operated wheelchair with multi-posture characteristics," *2017 2nd Asia-Pacific Conf. Intell. Robot Syst. ACIRS 2017*, pp. 151–155, 2017, doi: 10.1109/ACIRS.2017.7986083.
- [11] Z. Raiyan, M. S. Nawaz, A. K. M. A. Adnan, and M. H. Imam, "Design of an arduino based voice-controlled automated wheelchair," *5th IEEE Reg. 10 Humanit. Technol. Conf. 2017, R10-HTC 2017*, vol. 2018-January, pp. 267–270, 2018, doi: 10.1109/R10-HTC.2017.8288954.
- [12] M. F. R. Al-Okby, S. Neubert, N. Stoll, and K. Thurow, "Complementary functions for intelligent wheelchair head tilts controller," *SISY 2017 - IEEE 15th Int. Symp. Intell. Syst. Informatics, Proc.*, pp. 117–122, 2017, doi: 10.1109/SISY.2017.8080536.
- [13] X. Gao, L. Shi, and Q. Wang, "The design of robotic wheelchair control system based on hand gesture control for the disabled," *2017 Int. Conf.*

- Robot. Autom. Sci. ICRAS 2017*, pp. 30–34, 2017, doi: 10.1109/ICRAS.2017.8071911.
- [14] S. U. Khadilkar and N. Wagdarikar, “Android phone controlled voice, gesture and touch screen operated smart wheelchair,” *2015 Int. Conf. Pervasive Comput. Adv. Commun. Technol. Appl. Soc. ICPC 2015*, vol. 00, no. c, pp. 1–4, 2015, doi: 10.1109/PERVASIVE.2015.7087119.
- [15] P. Dey, M. M. Hasan, S. Mostofa, and A. I. Rana, “Smart wheelchair integrating head gesture navigation,” *1st Int. Conf. Robot. Electr. Signal Process. Tech. ICREST 2019*, pp. 329–334, 2019, doi: 10.1109/ICREST.2019.8644322.
- [16] A. T. Noman, M. S. Khan, M. E. Islam, and H. Rashid, “A New Design Approach for Gesture Controlled Smart Wheelchair Utilizing Microcontroller,” *2018 Int. Conf. Innov. Sci. Eng. Technol. ICISSET 2018*, no. October, pp. 64–68, 2018, doi: 10.1109/ICISSET.2018.8745607.
- [17] B. Champaty, P. Dubey, S. Sahoo, S. S. Ray, and K. Pal, “rehabilitation devices,” pp. 3–6, 2014.
- [18] S. K. Swee and L. Z. You, “Fast Fourier analysis and EEG classification brainwave controlled

- wheelchair,” *Proc. 2016 2nd Int. Conf. Control Sci. Syst. Eng. ICCSSE 2016*, pp. 20–23, 2016, doi: 10.1109/CCSSE.2016.7784344.
- [19] W. Zgallai *et al.*, “Deep Learning AI Application to an EEG driven BCI Smart Wheelchair,” *2019 Adv. Sci. Eng. Technol. Int. Conf. ASET 2019*, pp. 1–5, 2019, doi: 10.1109/ICASET.2019.8714373.
- [20] Z. Su, X. Xu, D. Jiawei, and W. Lu, “Intelligent wheelchair control system based on BCI and the image display of EEG,” *Proc. 2016 IEEE Adv. Inf. Manag. Commun. Electron. Autom. Control Conf. IMCEC 2016*, pp. 1350–1354, 2017, doi: 10.1109/IMCEC.2016.7867433.
- [21] K. T. Kim and S. W. Lee, “Towards an EEG-based intelligent wheelchair driving system with vibrotactile stimuli,” *2016 IEEE Int. Conf. Syst. Man, Cybern. SMC 2016 - Conf. Proc.*, pp. 2382–2385, 2017, doi: 10.1109/SMC.2016.7844595.
- [22] F. H. Tyastuti, Y. Aniroh, D. Muslimin, and A. K. R. Effendy, “Classification of EMG signal on arm muscle motion using special fourier transformation to control electric wheelchair,” *Proceeding - ICAMIMIA 2017 Int. Conf. Adv. Mechatronics*,

- Intell. Manuf. Ind. Autom.*, pp. 19–24, 2018, doi: 10.1109/ICAMIMIA.2017.8387550.
- [23] R. Hardiansyah, A. Ainurrohmah, Y. Aniroh, and F. H. Tyas, “The electric wheelchair control using electromyography sensor of arm muscle,” *Proc. 2016 Int. Conf. Inf. Commun. Technol. Syst. ICTS 2016*, pp. 129–134, 2017, doi: 10.1109/ICTS.2016.7910286.
- [24] A. G. Bhakt Dandamudi, D. N. Rao, V. P. Aravilli, and R. Sunitha, “Single channel electromyography controlled wheelchair implemented in virtual instrumentation,” *Proc. 3rd Int. Conf. Comput. Methodol. Commun. ICCMC 2019*, no. Iccmc, pp. 1040–1045, 2019, doi: 10.1109/ICCMC.2019.8819793.
- [25] S. F. Ahmed *et al.*, “Mobility assistance robot for disabled persons using electromyography(EMG) sensor,” *2018 IEEE Int. Conf. Innov. Res. Dev. ICIRD 2018*, no. May, pp. 1–5, 2018, doi: 10.1109/ICIRD.2018.8376304.
- [26] E. Yulianto and T. B. Indrato, “The Design of Electrical Wheelchairs with Electromyography Signal Controller for People with Paralysis,” *Electr.*

- Electron. Eng.*, vol. 8, no. 1, pp. 1–9, 2018, doi: 10.5923/j.eee.20180801.01.
- [27] B. Triwahyu, M. Nugraha, E. Y. St, T. Indrato, and J. T. Elektromedik, “Kursi Roda Dengan Kontrol Sinyal EMG Berbasis Wireless Dilengkapi Sensor Pengaman Benturan ( Parameter EMG ),” pp. 1–9, 2018.
- [28] A. Gourav, “Wireless interface of Servo Motors using Potentiometers via Bluetooth module and RF,” pp. 207–210, 2016.
- [29] Yimyeongjun, “Electronotive wheelchair for controlling an electromyogram an its controlling method,” no. 12, pp. 1–9, 2008.
- [30] S. F. Wong, B. Lin, and Z. C. Luo, “Multi-control and function design of ergonomic electric wheelchair for reducing pressure ulcer problem,” *IEEE Int. Conf. Ind. Eng. Eng. Manag.*, vol. 2017-Decem, pp. 240–244, 2018, doi: 10.1109/IEEM.2017.8289888.
- [31] N. M. Thamrin, R. Rosman, and D. S. Sarmawi, “Design and analysis of wireless controller panel using RF module’s for robotic wheelchair,” *2011 IEEE Symp. Ind. Electron. Appl. ISIEA 2011*, pp.

- 376–381, 2011, doi: 10.1109/ISIEA.2011.6108735.
- [32] Putri and Dkk, “Kursi Roda dengan Kontrol Sinyal EMG dilengkapi dengan Rangkaian Safety ( Parameter EMG ),” pp. 1–8, 2014.
- [33] P. Kevin and G. Thibodeau, “The Human Body in Health & Disease,” vol. Fifth Edit, pp. 348–371, 2009.
- [34] S. Wangko, “Jaringan Otot Rangka Sistem Membran Dan Struktur Halus Unit Kontraktil,” *J. Biomedik*, vol. 6, no. 11, pp. S27-32, 2014.
- [35] I. Pratiwi, R. Dharmastiti, and L. Setyowati, “Letak Elektroda Elektromiografi pada Upper Extremity Muscle.”
- [36] M. t. nomiyasari, ir.ratna adil, m.t., paulus susetyo w., s.t., ir. moch. rochmad, “Perancangan Dan Pembuatan Model Ecg Dan Emg Dalam Satu Unit Pc,” *Peranc. Dan Pembuatan Model Ecg Dan Emg Dalam Satu Unit Pc*, pp. 1–9, 2011.
- [37] Muliarta, “SENIAM Electromyograph,” pp. 10–38, 2014.
- [38] D. A. Letavin, “Microstrip diplexer implemented on high-pass and low-pass filters,” *Int. Conf. Young Spec. Micro/Nanotechnologies Electron Devices*,



- EDM*, vol. 2018-July, pp. 199–202, 2018, doi: 10.1109/EDM.2018.8435001.
- [39] B. N. Thakkar and V. H. Nayak, “Automatic design of low power CMOS buffer-chain circuit using differential evolutionary algorithm and particle swarm optimization,” *2017 Int. Conf. Algorithms, Methodol. Model. Appl. Emerg. Technol. ICAMMAET 2017*, vol. 2017-Janua, pp. 1–5, 2017, doi: 10.1109/ICAMMAET.2017.8186702.
- [40] D. Berthiaume, S. Sharma, and N. Constantin, “Low current, 100MHz bandwidth envelope detector for CMOS RFIC PAs,” *Can. Conf. Electr. Comput. Eng.*, vol. 2016-October, pp. 8–11, 2016, doi: 10.1109/CCECE.2016.7726694.
- [41] R. P. Chaudhari and M. K. Chopade, “Ethernet based field control module for industrial process monitor and control using ATmega328,” *Int. Conf. Commun. Signal Process. ICCSP 2016*, pp. 2098–2101, 2016, doi: 10.1109/ICCSP.2016.7754548.
- [42] V. K. Singh, A. Sahu, A. Beg, B. Khan, and S. Kumar, “Speed Direction Control of DC Motor through Bluetooth HC-05 Using Arduino,” *2018 Int. Conf. Adv. Comput. Telecommun. ICACAT*

2018, pp. 1–3, 2018, doi:  
10.1109/ICACAT.2018.8933698.

- [43] W. Liu, Y. Pan, and X. Zhang, “An Automated Evaluation System for App Inventor Apps,” *2018 IEEE 16th Intl Conf Dependable, Auton. Secur. Comput. 16th Intl Conf Pervasive Intell. Comput. 4th Intl Conf Big Data Intell. Comput. Cyber Sci. Technol. Congr.*, pp. 230–235, 2018, doi: 10.1109/DASC/PiCom/DataCom/CyberSciTec.2018.00048.

- [44] Y. R. Tsai and J. H. Ko, “Implementation of a portable multi-channel EMG signal detection system for Android-based smartphones by using USB-OTG interface,” *Proc. 4th IEEE Int. Conf. Appl. Syst. Innov. 2018, ICASI 2018*, pp. 766–769, 2018, doi: 10.1109/ICASI.2018.8394373.