

DAFTAR PUSTAKA

- [1] Tim Riskesdas 2018, “Laporan Riskesdas 2018 Nasional.pdf,” *Lembaga Penerbit Balitbangkes*. 2018, [Online]. Available: [http://repository.bkpk.kemkes.go.id/3514/1/Laporan Riskesdas 2018 Nasional.pdf](http://repository.bkpk.kemkes.go.id/3514/1/Laporan%20Riskesdas%202018%20Nasional.pdf).
- [2] P. Madona, “Alat Bantu Terapi Pasca Stroke untuk Tangan,” *J. Elektro dan Mesin Terap.*, vol. 4, no. 1, pp. 27–36, 2018, doi: 10.35143/elementer.v4i1.1422.
- [3] S. S. Virani *et al.*, *Heart disease and stroke statistics—2020 update a report from the American Heart Association*, vol. 141, no. 9. 2020.
- [4] C. Greco, T. H. Weerakkody, V. Cichella, L. Pagnotta, and C. Lamuta, “Lightweight Bioinspired Exoskeleton for Wrist Rehabilitation Powered by Twisted and Coiled Artificial Muscles,” *Robotics*, vol. 12, no. 1, 2023, doi: 10.3390/robotics12010027.
- [5] J. D. Mona, G. D. Kandou, F. L. F. G. Langi, F. Kesehatan, M. Universitas, and S. Ratulangi,

- “Proporsi Obesitas Sentral dan Stroke Menurut Provinsi di Indonesia Tahun 2018,” *J. KESMAS*, vol. 11, no. 2, pp. 151–161, 2022.
- [6] R. K. Sari and D. Kuswanto, “Pengembangan Desain Lower Limb Eksoskeleton untuk Penderita Disabilitas Pasca Strok dengan Memperhitungkan Movement Differences,” *J. Sains dan Seni ITS*, vol. 9, no. 1, pp. 38–43, 2020, doi: 10.12962/j23373520.v9i1.51835.
- [7] W. H. M. S. A. M. S. M. A. Mohd Safirin Karis1*, Hyreil Anuar Kasdirin2, Norafizah Abas2, “Emg Based Control of Wrist Exoskeleton,” vol. 24, no. 2, pp. 391–406, 2023.
- [8] A. González-Mendoza, I. Quiñones-Urióstegui, S. Salazar-Cruz, A. I. Perez-Sanpablo, R. López-Gutiérrez, and R. Lozano, “Design and Implementation of a Rehabilitation Upper-limb Exoskeleton Robot Controlled by Cognitive and Physical Interfaces,” *J. Bionic Eng.*, vol. 19, no. 5, pp. 1374–1391, 2022, doi: 10.1007/s42235-022-00214-z.
- [9] C. Y. Wu, C. L. Yang, M. De Chen, K. C. Lin, and

L. L. Wu, “Unilateral versus bilateral robot-assisted rehabilitation on arm-trunk control and functions post stroke: A randomized controlled trial,” *J. Neuroeng. Rehabil.*, vol. 10, no. 1, pp. 1–10, 2013, doi: 10.1186/1743-0003-10-35.

- [10] S. Hartono and J. Dewanto, “Perancangan Exoskeleton Untuk Terapi Range of Motion Pasif Lengan Atas Tahap Lanjut Penderita Stroke,” *J. Tek. Mesin*, vol. 18, no. 1, pp. 20–24, 2021, doi: 10.9744/jtm.18.1.20-24.
- [11] J. C. Perry, J. Rosen, and S. Burns, “Upper-limb powered exoskeleton design,” *IEEE/ASME Trans. Mechatronics*, vol. 12, no. 4, pp. 408–417, 2007, doi: 10.1109/TMECH.2007.901934.
- [12] Q. Meng *et al.*, “Pilot Study of a Powered Exoskeleton for Upper Limb Rehabilitation Based on the Wheelchair,” *Biomed Res. Int.*, vol. 2019, 2019, doi: 10.1155/2019/9627438.
- [13] Y. Ganesan, S. Gobee, and V. Durairajah, “Development of an Upper Limb Exoskeleton for Rehabilitation with Feedback from EMG and IMU Sensor,” *Procedia - Procedia Comput. Sci.*, vol. 76, 97

- no. Iris, pp. 53–59, 2015, doi: 10.1016/j.procs.2015.12.275.
- [14] L. D. L. da Silva, T. F. Pereira, V. R. Q. Leithardt, L. O. Seman, and C. A. Zeferino, “Hybrid impedance-admittance control for upper limb exoskeleton using electromyography,” *Appl. Sci.*, vol. 10, no. 20, pp. 1–19, 2020, doi: 10.3390/app10207146.
- [15] S. López-Méndez, H. V. Martínez-Tejada, and M. F. Valencia-García, “Development of an armored upper limb exoskeleton,” *Rev. Fac. Ing.*, no. 95, pp. 109–117, 2020, doi: 10.17533/udea.redin.20191148.
- [16] Triwiyanto, O. Wahyunggoro, H. A. Nugroho, and H. Herianto, “Performance Analysis of the Windowing Technique on Elbow Joint Angle Estimation Using Electromyography Signal,” *J. Phys. Conf. Ser.*, vol. 1108, no. 1, pp. 0–6, 2018, doi: 10.1088/1742-6596/1108/1/012004.
- [17] B. Chen *et al.*, “Volitional control of upper-limb exoskeleton empowered by EMG sensors and machine learning computing,” *Array*, vol. 17, no.

January, p. 100277, 2023, doi:
10.1016/j.array.2023.100277.

- [18] M. H. Jali, I. M. Ibrahim, M. F. Sulaima, T. A. Izzuddin, and W. M. Bukhari, “EMG signal features extraction of different arm movement for rehabilitation device,” *Int. J. Appl. Eng. Res.*, vol. 9, no. 21, pp. 11151–11162, 2014.
- [19] M. A. Gull, S. Bai, and T. Bak, “A review on design of upper limb exoskeletons,” *Robotics*, vol. 9, no. 1, 2020, doi: 10.3390/robotics9010016.
- [20] M. P. Prof. Dr.dr. James Tangkudung, Sportmed, *Anatomi Movement*. 2016.
- [21] S. D. Purba *et al.*, “Efektivitas ROM (Range of Motion) terhadap Kekuatan Otot pada Pasien Stroke di Rumah Sakit Royal Prima Tahun 2021,” *JUMANTIK (Jurnal Ilm. Penelit. Kesehatan)*, vol. 7, no. 1, p. 79, 2022, doi: 10.30829/jumantik.v7i1.10952.
- [22] R. N. Khushaba, S. Kodagoda, M. Takruri, and G. Dissanayake, “Toward improved control of prosthetic fingers using surface electromyogram

- (EMG) signals,” *Expert Syst. Appl.*, vol. 39, no. 12, pp. 10731–10738, 2012, doi: 10.1016/j.eswa.2012.02.192.
- [23] N. Yousif *et al.*, “No 主観的健康感を中心とした在宅高齢者における健康関連指標に関する共分散構造分析Title,” *J. Phys. Ther. Sci.*, vol. 9, no. 1, pp. 1–11, 2018, [Online]. Available: <http://dx.doi.org/10.1016/j.neuropsychologia.2015.07.010><http://dx.doi.org/10.1016/j.visres.2014.07.001><https://doi.org/10.1016/j.humov.2018.08.006><http://www.ncbi.nlm.nih.gov/pubmed/24582474><https://doi.org/10.1016/j.gaitpost.2018.12.007><https://doi.org/10.1016/j.gaitpost.2018.12.007>
- [24] M. K. Tageldeen, I. Elamvazuthi, and N. Perumal, “Motion control for a multiple input rehabilitation wearable exoskeleton using fuzzy logic and PID,” *2016 IEEE 14th Int. Work. Adv. Motion Control. AMC 2016*, no. 0153, pp. 473–478, 2016, doi: 10.1109/AMC.2016.7496395.
- [25] E. G. Avila and W. Yu, “Stable PID Tracking Control with Application to a 7-DoF Exoskeleton Robot,” no. 5, 2016.

- [26] DFRobot, “Analog EMG Sensor by OYMotion SKU: SEN0240,” 2017, [Online]. Available: [https://media.digikey.com/pdf/Data Sheets/DFRobot PDFs/SEN0240_Web.pdf](https://media.digikey.com/pdf/Data_Sheets/DFRobot_PDFs/SEN0240_Web.pdf).
- [27] R. I. Alfian, A. Ma’Arif, and S. Sunardi, “Noise reduction in the accelerometer and gyroscope sensor with the Kalman filter algorithm,” *J. Robot. Control*, vol. 2, no. 3, pp. 180–189, 2021, doi: 10.18196/jrc.2375.
- [28] M. Thowil Afif and I. Ayu Putri Pratiwi, “Analisis Perbandingan Baterai Lithium-Ion, Lithium-Polymer, Lead Acid dan Nickel-Metal Hydride pada Penggunaan Mobil Listrik - Review,” *J. Rekayasa Mesin*, vol. 6, no. 2, pp. 95–99, 2015, doi: 10.21776/ub.jrm.2015.006.02.1.
- [29] Espressif, “ESP32 Series Datasheet,” *Espr. Syst.*, pp. 1–69, 2022, [Online]. Available: https://www.espressif.com/sites/default/files/documentation/esp32_datasheet_en.pdf.

~Halaman ini sengaja dikosongkan~