DAFTAR PUSTAKA

[1] W. H. Organization, “WHO | Global Health Estimates,” *Global Health Estimates: Key figures and tables*, vol. Multimedia, no. Health Statistics and Information Systems. hal. 1–13, 2011, Diakses: Mar 11, 2021. [Daring]. Tersedia pada: https://www.who.int/healthinfo/global_burden_disease/en/.

[2] K. Strong, C. Mathers, dan R. Bonita, “Preventing stroke: saving lives around the world,” *Lancet Neurol.*, vol. 6, no. 2, hal. 182–187, Feb 2007, doi: 10.1016/S1474-4422(07)70031-5.

[3] V. L. Feigin *et al.*, “Global and regional burden of stroke during 1990-2010: Findings from the Global Burden of Disease Study 2010,” *Lancet*, vol. 383, no. 9913, hal. 245–255, Jan 2014, doi: 10.1016/S0140-6736(13)61953-4.

[4] M. O. Owolabi *et al.*, “The burden of stroke in Africa: A glance at the present and a glimpse into the future,” *Cardiovasc. J. Afr.*, vol. 26, no. 2, hal. S27–S38, Mar 2015, doi: 10.5830/CVJA-2015-038.

[5] T. Hamid dan D. Satori, “Ilmu Kedokteran Fisik dan Rehabilitasi,” *Surabaya Unit Rehabil. Med. RSUD. Dr. Soetomo*, 1992.

[6] C. Y. Wu, C. L. Yang, M. De Chen, K. C. Lin, dan 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, hal. 1–10, 2013, doi: 10.1186/1743-0003-10-35.

[7] M. Haghshenas-Jaryani, C. Pande, dan B. J. Muthu Wijesundara, “Soft robotic bilateral hand rehabilitation system for fine motor learning,” *IEEE Int. Conf. Rehabil. Robot.*, vol. 2019-June, hal. 337–342, 2019, doi: 10.1109/ICORR.2019.8779510.

[8] M. R. M. Demtania Gusti Kristiani, Triwiyanto, “Pengembangan Perangkat *Exoskeleton* Tangan Dan Lengan Melalui Kendali Sinyal EMG Disertai Sistem Informasi Perkembangan Terapi Berbasis IOT,” in *Prosiding Seminar Nasional Kesehatan, Politeknik Kesehatan Kementerian Kesehatan Surabaya*, 2020, hal. 1–7.

[9] C. C. Kuo, H. Y. Kung, H. C. Wu, dan M. J.

Wang, “Developing a hand sizing system for a hand *exoskeleton* device based on the Kansei Engineering method,” *J. Ambient Intell. Humaniz. Comput.*, no. 168, 2020, doi: 10.1007/s12652-020-02354-8.

[10] M. Troncossi, “Design and Manufacturing of a Hand-and-Wrist *Exoskeleton* Prototype for the Rehabilitation of Post-Stroke Patients,” Diakses: Feb 26, 2021. [Daring]. Tersedia pada: https://www.academia.edu/24939843/Design_and_Manufacturing_of_a_Hand_and_Wrist_*Exoskeleton*_Prototype_for_the_Rehabilitation_of_Post_Stroke_Patients.

[11] D. Leonardis *et al.*, “An EMG-controlled robotic hand *exoskeleton* for bilateral rehabilitation,” *IEEE Trans. Haptics*, vol. 8, no. 2, hal. 140–151, 2015, doi: 10.1109/TOH.2015.2417570.

[12] Z. Lu, X. Chen, X. Zhang, K. Y. Tong, dan P. Zhou, “Real-Time Control of an *Exoskeleton* Hand Robot with Myoelectric Pattern Recognition,” *Int. J. Neural Syst.*, vol. 27, no. 5, hal. 1–11, 2017, doi: 10.1142/S0129065717500095.

[13] S. Guo, W. Zhang, J. Guo, J. Gao, dan Y. Hu,

"Design and kinematic simulation of a novel *exoskeleton* rehabilitation hand robot," in *2016 IEEE International Conference on Mechatronics and Automation, IEEE ICMA 2016*, 2016, hal. 1125–1130, doi: 10.1109/ICMA.2016.7558720.

[14] M. V. Arteaga, J. C. Castiblanco, I. F. Mondragon, J. D. Colorado, dan C. Alvarado-Rojas, "EMG-driven hand model based on the classification of individual finger movements," *Biomed. Signal Process. Control*, vol. 58, hal. 101834, 2020, doi: 10.1016/j.bspc.2019.101834.

[15] E. R. Triolo, M. H. Stella, dan B. F. Busha, "A force augmenting *exoskeleton* for the human hand designed for pinching and grasping," in *Proceedings of the Annual International Conference of the IEEE Engineering in Medicine and Biology Society, EMBS*, 2018, vol. 2018-July, hal. 1875–1878, doi: 10.1109/EMBC.2018.8512606.

[16] S. Latif, J. Javed, M. Ghafoor, M. Moazzam, dan A. A. Khan, "Design and development of muscle and flex sensor controlled robotic hand for disabled persons," *2019 Int. Conf. Appl. Eng.*

Math. ICAEM 2019 - Proc., no. March, hal. 1–6, 2019, doi: 10.1109/ICAEM.2019.8853757.

[17] A. Syed, Z. T. H. Agasbal, T. Melligeri, dan B. Gudur, "Flex Sensor Based Robotic Arm Controller Using Micro Controller," *J. Softw. Eng. Appl.*, vol. 05, no. 05, hal. 364–366, 2012, doi: 10.4236/jsea.2012.55042.

[18] S. Guo, Z. Wang, dan J. Guo, "Study on Motion Recognition for a Hand Rehabilitation Robot Based on sEMG Signals," *Proc. 2019 IEEE Int. Conf. Mechatronics Autom. ICMA 2019*, hal. 1061–1066, 2019, doi: 10.1109/ICMA.2019.8816497.

[19] Juliatika, "Hubungan Masa Kerja Dengan Keluhan Carpal Tunnel Syndrome Pada Penjahit Di Kecamatan Lowokwaru Kota Malang," *Karya Tulis Akhir Univ. MUHAMMADIYAH MALANG Fak. Kedokt.*, vol. 4, hal. 9–15, 2017.

[20] A. Hartono, *Patofisiologi: Aplikasi Pada Praktik Keperawatan*. EGC, 2010.

[21] Y. Cahyati, "Perbandingan latihan ROM unilateral dan latihan ROM bilateral terhadap kekuatan otot pasien hemiparese akibat stroke iskemik di RSUD

Kota Tasikmalaya dan RSUD Kab. Ciamis," *Depok Univ. Indones. Retrieved from http//lontar. ui. ac. id/file*, 2011.

[22] J. Rosen dan J. C. Perry, "Upper limb powered *exoskeleton*," *Int. J. Humanoid Robot.*, vol. 4, no. 3, hal. 529–548, 2007, doi: 10.1142/S021984360700114X.

[23] A. A. Blank, J. A. French, A. U. Pehlivan, dan M. K. O'Malley, "Current Trends in Robot-Assisted Upper-Limb Stroke Rehabilitation: Promoting Patient Engagement in Therapy," *Curr. Phys. Med. Rehabil. Reports*, vol. 2, no. 3, hal. 184–195, 2014, doi: 10.1007/s40141-014-0056-z.

[24] J. B. Rowe, V. Chan, M. L. Ingemanson, S. C. Cramer, E. T. Wolbrecht, dan D. J. Reinkensmeyer, "Robotic Assistance for Training Finger Movement Using a Hebbian Model: A Randomized Controlled Trial," *Neurorehabil. Neural Repair*, vol. 31, no. 8, hal. 769–780, 2017, doi: 10.1177/1545968317721975.

[25] F. Aggogeri, T. Mikolajczyk, dan J. O'Kane, "Robotics for rehabilitation of hand movement in stroke survivors," *Adv. Mech. Eng.*, vol. 11, no. 4,

hal. 1–14, 2019, doi: 10.1177/1687814019841921.

[26] H. Nurfaizal dan Y. M. Djaksana, “Prototype Sistem Kendali Robot ARM Gripper Manipulator menggunakan Flex Sensor Dan MPU6050 Berbasis Internet of Things,” vol. 13, no. 4, 2021, doi: 10.30998/faktorexacta.v13i4.6598.

[27] Espressif Systems, “Datasheet ESP32 Series,” *Espr. Syst.*, hal. 1–61, 2019, [Daring]. Tersedia pada: www.espressif.com.

[28] Handson_Technology, “Handson Technology Datasheet G12-N20 Geared Mini DC Motor Brief Data.” Diakses: Apr 27, 2021. [Daring]. Tersedia pada: www.handsontec.com.