DAFTAR PUSTAKA

[1] D. Permatasari, “PELAKSANAAN KREASI ATENSI LANJUT USIA DALAM RANGKA PERINGATAN HARI LANJUT USIA NASIONAL (HLUN) KE-25 TAHUN 2021,” *KEMENTRIAN SOSIAL REPUBLIK INDONESIA*, May 2022.

[2] Partinah, K. Saputro, and Ferenda, *PROFIL PENDUDUK LANJUT USIA PROVINSI JAWA BARAT*. Jawa Barat: Badan Pusat Statistik Provinsi Jawa Barat, 2023.

[3] *Buku Kesehatan Lanjut Usia*. jakarta: Kementrian Kesehatan RI, 2016.

[4] S. Pandelaki, L. Sitanayah, and M. Liem, “Sistem Pendeteksi Jatuh Berbasis Internet of Things,” *JEECOM Journal of Electrical Engineering and Computer*, vol. 5, no. 1, pp. 4–10, Apr. 2023, doi: 10.33650/jeecom.v5i1.5802.

[5] S. Lafuente-Arroyo, P. Martín-Martín, C. Iglesias-Iglesias, S. Maldonado-Bascón, and F. J. Acevedo-Rodríguez, “RGB camera-based fallen person detection system embedded on a mobile platform,” *Expert Syst Appl*, vol. 197, p. 116715, Jul. 2022, doi: 10.1016/j.eswa.2022.116715.

[6] S. Perwira, M. I. A. Timur, and A. Harjoko, “Sistem Deteksi Orang Jatuh Dengan Menggunakan Sensor Kamera Kinect Dengan Metode AdaBoost,” *IJEIS (Indonesian Journal of Electronics and Instrumentation Systems)*, vol. 11, no. 2, p. 113, Oct. 2021, doi: 10.22146/ijeis.49974.

[7] D. Ajerla, S. Mahfuz, and F. Zulkernine, “A Real-Time Patient Monitoring Framework for Fall Detection,” *Wirel Commun Mob Comput*, vol. 2019, pp. 1–13, Sep. 2019, doi: 10.1155/2019/9507938.

[8] “Ageing and health,” https://www.who.int/news-room/fact-sheets/detail/ageing-and-health.

[9] F. Dady, H. P. Memah, and J. A. Kolompoy, “Hubungan Bahaya Lingkungan dengan Risiko Jatuh Lanjut Usia di BPLU Senja Cerah Manado,” *Jurnal Persatuan Perawat Nasional Indonesia (JPPNI)*, vol. 3, no. 3, p. 149, Feb. 2020, doi: 10.32419/jppni.v3i3.165.

[10] M. H. Desai and B. J. McKinnon, “Balance and Dizziness Disorders in the Elderly: a Review,” *Curr Otorhinolaryngol Rep*, vol. 8, no. 2, pp. 198–207, Jun. 2020, doi: 10.1007/s40136-020-00281-y.

[11] A. J. Cruz-Jentoft *et al.*, “Sarcopenia: revised European consensus on definition and diagnosis,” *Age Ageing*, vol. 48, no. 1, pp. 16–31, Jan. 2019, doi: 10.1093/ageing/afy169.

[12] E. Casabona, F. Riva-Rovedda, A. Castello, D. Sciarrotta, P. Di Giulio, and V. Dimonte, “Factors Associated with Falls in Community-Dwelling Older Adults: A Subgroup Analysis from a Telemergency Service,” *Geriatrics*, vol. 9, no. 3, p. 69, May 2024, doi: 10.3390/geriatrics9030069.

[13] N. Bleijenberg, N. P. A. Zuithoff, A. K. Smith, N. J. de Wit, and M. J. Schuurmans, “Disability in the individual ADL, IADL, and mobility among older adults: A prospective cohort study,” *J Nutr Health Aging*, vol. 21, no. 8, pp. 897–903, Oct. 2017, doi: 10.1007/s12603-017-0891-6.

[14] N. Toosizadeh, H. Ehsani, M. Miramonte, and J. Mohler, “Proprioceptive impairments in high fall risk older adults: the effect of mechanical calf vibration on postural balance,” *Biomed Eng Online*, vol. 17, no. 1, p. 51, Dec. 2018, doi: 10.1186/s12938-018-0482-8.

[15] J. R. S. Fhon *et al.*, “Association between Sarcopenia, Falls, and Cognitive Impairment in Older People: A Systematic Review with Meta-Analysis,” *Int J Environ Res Public Health*, vol. 20, no. 5, p. 4156, Feb. 2023, doi: 10.3390/ijerph20054156.

[16] “FALLS,” https://www.who.int/news-room/fact-sheets/detail/falls.

[17] A. Muladi, S. T. Sutrisni, S. Lestari, and S. Suminar, “Tingkat Keamanan Lingkungan Terhadap Risiko Jatuh pada Lansia Di Panti Werdha Dharma Bhakti Surakarta,” *Khatulistiwa Nursing Journal*, vol. 5, no. 1, pp. 18–25, Jan. 2023, doi: 10.53399/knj.v5i1.204.

[18] F. Dady, H. P. Memah, and J. A. Kolompoy, “Hubungan Bahaya Lingkungan dengan Risiko Jatuh Lanjut Usia di BPLU Senja Cerah Manado,” *Jurnal Persatuan Perawat Nasional Indonesia (JPPNI)*, vol. 3, no. 3, p. 149, Feb. 2020, doi: 10.32419/jppni.v3i3.165.

[19] D. Mrozek, A. Koczur, and B. Małysiak-Mrozek, “Fall detection in older adults with mobile IoT devices and machine learning in the cloud and on the edge,” *Inf Sci (N Y)*, vol. 537, pp. 132–147, Oct. 2020, doi: 10.1016/j.ins.2020.05.070.

[20] S. Pandelaki, L. Sitanayah, and M. Liem, “Sistem Pendeteksi Jatuh Berbasis Internet of Things,” *JEECOM Journal of Electrical Engineering and Computer*, vol. 5, no. 1, pp. 4–10, Apr. 2023, doi: 10.33650/jeecom.v5i1.5802.

[21] P. A. R. Leo Lede, “Implementasi Algoritma Complementary Filter untuk Merancang Bangun Interaksi Manusia dan Smartphone Menggunakan Gerakan Kepala,” *Jurnal Poli-Teknologi*, vol. 19, no. 3, pp. 207–216, Jan. 2021, doi: 10.32722/pt.v19i3.3024.

[22] Mudarris and G. S. Zain, “Implementasi Sensor Inertial Meansurenment Unit (IMU) untuk Monitoring Perilaku Roket ,” vol. 2, No. 1, Feb. 2020.

[23] P. Ragam and N. Devidas Sahebraoji, “Application of MEMS-based accelerometer wireless sensor systems for monitoring of blast-induced ground vibration and structural health: a review,” *IET Wireless Sensor Systems*, vol. 9, no. 3, pp. 103–109, Jun. 2019, doi: 10.1049/iet-wss.2018.5099.

[24] K. Rao *et al.*, “A High-resolution Area-change-based Capacitive MEMS Accelerometer for Tilt Sensing,” in *2020 IEEE International Symposium on*

Inertial Sensors and Systems (INERTIAL), IEEE, Mar. 2020, pp. 1–4. doi: 10.1109/INERTIAL48129.2020.9090016.

[25] H. Lee, H. Chung, and J. Lee, "Motion Artifact Cancellation in Wearable Photoplethysmography Using Gyroscope," *IEEE Sens J*, vol. 19, no. 3, pp. 1166–1175, Feb. 2019, doi: 10.1109/JSEN.2018.2879970.

[26] sobirin, "Mengakses Sensor MPU-6050 (Accelerometer dan Gyroscope) Menggunakan Arduino," WordPress.com.

[27] W. A. Gill, I. Howard, I. Mazhar, and K. McKee, "A Review of MEMS Vibrating Gyroscopes and Their Reliability Issues in Harsh Environments," *Sensors*, vol. 22, no. 19, p. 7405, Sep. 2022, doi: 10.3390/s22197405.

[28] A. Hossein *et al.*, "Kinocardiography Derived from Ballistocardiography and Seismocardiography Shows High Repeatability in Healthy Subjects," *Sensors*, vol. 21, no. 3, p. 815, Jan. 2021, doi: 10.3390/s21030815.

[29] Y. Yin, J. Zhang, M. Guo, X. Ning, Y. Wang, and J. Lu, "Sensor Fusion of GNSS and IMU Data for Robust Localization via Smoothed Error State Kalman Filter," *Sensors*, vol. 23, no. 7, p. 3676, Apr. 2023, doi: 10.3390/s23073676.

[30] I. A. Rahman, S. Rangkuti, and Agil Abdul Ghani Alghifari K, "Rancang Bangun Antena Rotasi Dengan Kalibrasi Berbasis Program Kalman Filter," *Jurnal Sistem Cerdas*, vol. 6, no. 3, pp. 204–212, Dec. 2023, doi: 10.37396/jsc.v6i3.333.

[31] R. Y. Adhitya, "Penerapan Extended Kalman Filter (EKF) Pada Sistem Monitoring Gelombang Laut Berbasis Sensor IMU GY955," *Jurnal Elektronika dan Otomasi Industri*, vol. 10, no. 3, Nov. 2023, doi: 10.33795/elkolind.v10i3.3714.

[32] M. H. Annaby, M. H. Said, A. M. Eldeib, and M. A. Rushdi, "EEG-based motor imagery classification using digraph Fourier transforms and extreme

learning machines," *Biomed Signal Process Control*, vol. 69, p. 102831, Aug. 2021, doi: 10.1016/j.bspc.2021.102831.

[33] S. Yu and S. Liu, "A Novel Adaptive Recursive Least Squares Filter to Remove the Motion Artifact in Seismocardiography," *Sensors*, vol. 20, no. 6, p. 1596, Mar. 2020, doi: 10.3390/s20061596.

[34] "Arduino Nano RP2040 Connect," Mouser Elektronics.

[35] S. Mindasari, M. As'ad, and D. Meilantika, "Jurnal Teknik Informatika Mahakarya (JTIM)," vol. Vol. 5, No. 2, Sep. 2022.

[36] M.-K. Tran, S. Panchal, T. D. Khang, K. Panchal, R. Fraser, and M. Fowler, "Concept Review of a Cloud-Based Smart Battery Management System for Lithium-Ion Batteries: Feasibility, Logistics, and Functionality," *Batteries*, vol. 8, no. 2, p. 19, Feb. 2022, doi: 10.3390/batteries8020019.

[37] "Baterai Polimer Litium 3.7V 2000MAh LP803860 Baterai Lipo untuk CCTV," Alibaba.

[38] P. Ramchandar Rao, "AUTOMATED GRAIN REPOSITORY USING IOT," *JOURNAL OF MECHANICS OF CONTINUA AND MATHEMATICAL SCIENCES*, vol. 15, no. 6, Jun. 2020, doi: 10.26782/jmcms.2020.06.00023.

[39] A. Wagyana and Rahmat, "Prototipe Modul Praktik untuk Pengembangan Aplikasi Internet of Things (IoT)," vol. Vol 8, No. 1, Dec. 2019.