DAFTAR PUSTAKA

[1] T. Althoff, R. Sosič, J. L. Hicks, A. C. King, S. L. Delp, and J. Leskovec, "Large-scale physical activity data reveal worldwide activity inequality," *Nature 2017 547:7663*, vol. 547, no. 7663, pp. 336–339, Jul. 2017, doi: 10.1038/nature23018.

[2] "Jasa logistik ekspres tumbuh hingga 30% pada semester I-2021 - Page all." https://industri.kontan.co.id/news/jasa-logistik-ekspres-tumbuh-hingga-30-pada-semester-i-2021?page=all (accessed Jul. 20, 2022).

[3] I. M. Suradana and I. W. Sudiarsa, "Pengendalian Mobile Robot Menggunakan Personal Computer Dengan Koneksi Bluetooth," *Jurnal Nasional Pendidikan Teknik Informatika (JANAPATI)*, vol. 2, no. 1, p. 95, Mar. 2013, doi: 10.23887/janapati.v2i1.9766.

[4] S. G. Tzafestas, *Introduction to Mobile Robot Control*. Elsevier, 2014. doi: 10.1016/C2013-0-01365-5.

[5] T. A. Nugroho, M. Hutagalung, M. A. Susantio, V. Jeremias, and Y. Yonata, "Implementasi Sensor Fusion untuk Peningkatan Akurasi Sensor GPS," *JUPITER (JURNAL PENDIDIKAN TEKNIK ELEKTRO)*, vol. 3, no. 1, p. 26, Mar. 2018, doi: 10.25273/jupiter.v3i1.2385.

[6] Y. A. Pramana, "Implementasi Sensor Accelerometer, Gyroscope dan Magnetometer Berbasis Mikrokontroler untuk Menampilkan Posisi Benda Menggunakan Inertial Navigation System (INS)," 2013.

[7] F. Kurniawan, M. R. Erdata Nasution, O. Dinaryanto, and L. Lasmadi, "Penentuan Orientasi dan Translasi Gerakan UAV menggunakan Data Fusion berbasis Kalman Filter," *AVITEC*, vol. 3, no. 2, pp. 99–115, Jul. 2021, doi: 10.28989/avitec.v3i2.890.

[8] A. Farida and F. Rosalina, "Pelatihan Dasar-Dasar Pengoperasian GPS Garmin Bagi Mahasiswa Fakultas Pertanian Universitas Muhammadiyah Sorong," *Abdimas: Papua Journal of Community Service*, vol. 2, no. 1, p. 51, Jan. 2020, doi: 10.33506/pjcs.v2i1.995.

[9] E. I. al Khatib, M. A. Jaradat, M. Abdel-Hafez, and M. Roigari, "Multiple sensor fusion for mobile robot localization and navigation using the Extended Kalman Filter," in *2015 10th International Symposium on Mechatronics and its Applications (ISMA)*, Dec. 2015, pp. 1–5. doi: 10.1109/ISMA.2015.7373480.

[10] A. H. Aji, A. N. Jati, C. Setianingsih, F. T. Elektro, and U. Telkom, “Analisis Simulasi Extended Kalman Filter Pada Mobile Robot Navigation Menggunakan Laser Simulation Analysis of Extended Kalman Filter on Mobile Robot Navigation Using Laser,” vol. 6, no. 1, pp. 1401–1406, 2019.

[11] A. Skobeleva, V. Ugrinovskii, and I. Petersen, “Extended Kalman Filter for indoor and outdoor localization of a wheeled mobile robot,” in *2016 Australian Control Conference (AuCC)*, Nov. 2016, pp. 212–216. doi: 10.1109/AUCC.2016.7868190.

[12] G. Cai, H. Lin, and S. Kao, “Mobile Robot Localization using GPS, IMU and Visual Odometry,” in *2019 International Automatic Control Conference (CACS)*, Nov. 2019, pp. 1–6. doi: 10.1109/CACS47674.2019.9024731.

[13] U. Nehmzow, *Mobile Robotics: A Practical Introduction*. London: Springer London, 2003. doi: 10.1007/978-1-4471-0025-6.

[14] Min Wan Choi, J. S. Park, Bong Soo Lee, and Man Hyung Lee, “The performance of independent wheels steering vehicle(4WS) applied Ackerman geometry,” in *2008 International Conference on Control, Automation and Systems*, Oct. 2008, pp. 197–202. doi: 10.1109/ICCAS.2008.4694549.

[15] K. Yao, Y. Wang, Z. Hou, and X. Zhao, “Optimum Design and Calculation of Ackerman Steering Trapezium,” in *2008 International Conference on Intelligent Computation Technology and Automation (ICICTA)*, Oct. 2008, vol. 1, pp. 1248–1252. doi: 10.1109/ICICTA.2008.154.

[16] X. Wang, X. Wang, and D. M. Wilkes, *Machine Learning-based Natural Scene Recognition for Mobile Robot Localization in An Unknown Environment*. Singapore: Springer Singapore, 2020. doi: 10.1007/978-981-13-9217-7.

[17] R. González and F. RodrÄ±guez, “Comparative study of localization techniques for mobile robots based on indirect kalman filter,” *Proceedings of IFR Int. ...*, no. ii, pp. 253–258, 2009, [Online]. Available: http://www.ual.es/~rgs927/papers/ramon-gonzalez-isr09.pdf

[18] A. Adriansyah, “Perancangan Localization Menggunakan Metode Dead Reckoning,” *Jurnal Sinergi*, vol. 18, no. 1, pp. 25–30, 2014.

[19] I. R. Nourbakhsh and R. Siegwart, *Introduction to Autonomous Mobile Robots*, 1st ed. The MIT Press, 2004.

[20] D. H. Titterton, *Strapdown Inertial Navigation Technology - 2nd Edition*, 2nd ed. The Institution of Electrical Engineers, 2004.

[21] J. A. Cooney, W. L. Xu, and G. Bright, “Visual dead-reckoning for motion control of a Mecanum-wheeled mobile robot,” *Mechatronics*, vol. 14, no. 6, pp. 623–637, Jul. 2004, doi: 10.1016/j.mechatronics.2003.09.002.

[22] S. A. Reveliotis and P. M. Ferreira, “Deadlock avoidance policies for automated manufacturing cells,” *IEEE Transactions on Robotics and Automation*, vol. 12, no. 6, pp. 845–857, 1996, doi: 10.1109/70.544768.

[23] J. J. Leonard and H. F. Durrant-Whyte, “Mobile robot localization by tracking geometric beacons,” *IEEE Transactions on Robotics and Automation*, vol. 7, no. 3, pp. 376–382, Jun. 1991, doi: 10.1109/70.88147.

[24] S. G. Chan and V. Cheung, “Location Estimation and Uncertainty Analysis For Mobile Robots,” in *Sensor Networks and Configuration*, Berlin, Heidelberg: Springer Berlin Heidelberg, 2007, pp. 317–332. doi: 10.1007/3-540-37366-7_14.

[25] R. Lenain, B. Thuilot, C. Cariou, and P. Martiner, “A new nonlinear control for vehicle in sliding conditions: application to automatic guidance of farm vehicles using RTK GPS,” in *IEEE International Conference on Robotics and Automation, 2004. Proceedings. ICRA ’04. 2004*, 2004, vol. 2004, no. 5, pp. 4381-4386 Vol.5. doi: 10.1109/ROBOT.2004.1302407.

[26] G. Welch and G. Bishop, “An Introduction to the Kalman Filter,” *In Practice*, vol. 7, no. 1, pp. 1–16, 2006, doi: 10.1.1.117.6808.

[27] H. Durrant-Whyte and T. Bailey, “Simultaneous localization and mapping: part I,” *IEEE Robotics & Automation Magazine*, vol. 13, no. 2, pp. 99–110, Jun. 2006, doi: 10.1109/MRA.2006.1638022.

[28] P. S. Maybeck, *Stochastic Models, Estimation and Control: A Series of Monographs and Textbooks. 1*. Acad. Press, 1979. Accessed: Nov. 01, 2021. [Online]. Available: https://books.google.com.tr/books?id=7UXzzQEACAAJ

[29] R. González, F. Rodriquez, J. L. Guzman, and M. Berenguel, “COMPENSATION OF SLIDING EFFECTS IN THE CONTROL OF TRACKED MOBILE ROBOTS,” *Control*, pp. 566–571, 2008.

[30] M. Inertial and N. System, “Purwarupa Kontrol Kestabilan Posisi dan Sikap pada Pesawat Tanpa Awak Menggunakan IMU dan Algoritma Fusion Sensor Kalman Filter,” vol. 4, no. 1, pp. 25–34, 2014.

[31] M. B. Rhudy, R. A. Salguero, and K. Holappa, “A Kalman Filtering Tutorial for Undergraduate Students,” *International Journal of Computer Science &*

Engineering Survey, vol. 08, no. 01, pp. 01–18, Feb. 2017, doi: 10.5121/ijcses.2017.8101.

[32] S. Bijjahalli, R. Sabatini, and A. Gardi, "Advances in intelligent and autonomous navigation systems for small UAS," *Progress in Aerospace Sciences*, vol. 115, no. December 2019, p. 100617, 2020, doi: 10.1016/j.paerosci.2020.100617.

[33] R. B. Widodo and C. Wada, "Attitude Estimation Using Kalman Filtering: External Acceleration Compensation Considerations," *Journal of Sensors*, vol. 2016, no. June 2017, pp. 1–24, 2016, doi: 10.1155/2016/6943040.

[34] S. Bennett, "The past of pid controllers," *Annual Reviews in Control*, vol. 25, pp. 43–53, Jan. 2001, doi: 10.1016/S1367-5788(01)00005-0.

[35] K. J. Astrom and T. HÄgglund, *Advanced PID Control*. 2006.

[36] "ELEKTRO INDONESIA -TUTORIAL." https://www.elektroindonesia.com/elektro/tutor12.html (accessed Nov. 05, 2021).

[37] A. S. Taufik, "Sistem Navigasi Waypoint pada Autonomous Mobile Robot," *Jurnal Mahasiswa TEUB*, vol. 1, no. 1, pp. 1–6, 2013, [Online]. Available: http://elektro.studentjournal.ub.ac.id/index.php/teub/article/view/7

[38] Federal Aviation Administration, *Advanced Avionics Handbook*. Aviation Supplies & Academics, Inc., 2009.

[39] M. L. Seto, L. Paull, and S. Saeedi, *Introduction to autonomy for marine robots*, vol. 9781461456. 2013. doi: 10.1007/978-1-4614-5659-9_1.

[40] "Buy a Raspberry Pi 3 Model B+ – Raspberry Pi." https://www.raspberrypi.com/products/raspberry-pi-3-model-b-plus/ (accessed Nov. 02, 2021).

[41] "Arduino Mega 2560 Rev3 — Arduino Online Shop." https://store-usa.arduino.cc/products/arduino-mega-2560-rev3?selectedStore=us (accessed Nov. 02, 2021).

[42] "Overview | Adafruit Ultimate GPS | Adafruit Learning System." https://learn.adafruit.com/adafruit-ultimate-gps (accessed Nov. 02, 2021).

[43] "Tutorial Arduino mengakses driver motor L298N." https://www.nyebarilmu.com/tutorial-arduino-mengakses-driver-motor-l298n/ (accessed Nov. 02, 2021).

[44] “IT-25GA370 AWS - DOCUMENTOP.COM.” https://documentop.com/it-25ga370-aws_5a53efa41723ddd9dabd2078.html (accessed Jul. 14, 2022).

[45] “XL4015 Datasheet(PDF) - XLSEMI.” https://www.alldatasheet.com/datasheet-pdf/pdf/1134361/XLSEMI/XL4015.html (accessed Nov. 02, 2021).

[46] “TATTU 2200mAh 3s 35c Lipo Battery.” https://www.getfpv.com/tattu-2200mah-3s-35c-lipo-battery.html (accessed Jul. 14, 2022).

[47] A. Servo, “V1 Analog Servo V1,” *HuiDa RC International INC.*, no. 1, pp. 3–5, 2014, [Online]. Available: https://www.pololu.com/file/download/HD-3001HB.pdf?file_id=0J728

[48] “Overview | Adafruit BNO055 Absolute Orientation Sensor | Adafruit Learning System.” https://learn.adafruit.com/adafruit-bno055-absolute-orientation-sensor (accessed Nov. 02, 2021).