DAFTAR PUSTAKA

[1] L. C. PRICE, "The Death of the Citarum River: Indonesia's Most Toxic Waterway," 13 March 2017. [Online]. Available: http://pulitzercenter.org/reporting/death-citarum-river-indonesias-most-toxic-waterway.

[2] W. Schmidt, D. Raymond, D. Parish, I. G. C. Ashton, P. I. Miller, C. J. A. Compos and J. D. Shutler, "Design and operation of a low-cost and compact autonomous buoy sistem for use in coastal aquaculture and water quality monitoring," *Aquacultural Engineering,* p. 1, 2017.

[3] L. Emery, R. Smith, D. Mcneal and B. Hughes, "Drifting Buoy for Autonomous Measurement of River Environment," *Ocean,* pp. 1-8, 2009.

[4] J. MacMahan, "Drifter Trajectories in Riverine Environments Distribution," pp. 1-7, 2009.

[5] S. Khan, K. Ahmad and I. Khan, "Waypoint Navigation System Implementation via a Mobile Robot Using Global Positioning System (GPS) and Global System for Mobile Communications (GSM) Modems," *International Journal of Computational Engineering Research,* vol. 03, no. 7, p. 49, July 2013.

[6] G. P. Sari, "SISTEM WAYPOINT DENGAN METODE FUZZY LOGIC PADA MOBILE ROBOT," in *Buku Tugas Akhir*, Bandung, Universitas Telkom, S1 Teknik Elektro, 2018, p. 5.

[7] P. Ranacher, R. Brunauer, W. Trutschnig, S. V. d. Spek and S. Reich, "Why GPS Makes Distances Bigger Than They Are," *International Journal of Geographical Information Science,* pp. 1-2, 2015.

[8] S. Agarwal and J. Budideti, "GPS BASED NAVIGATION SYSTEMS," in *Proceedings of ICEECMPE International Conference*, New Delhi, 2013.

[9] Goverment, US, "GPS.Gov," Noaa, 05 12 2017. [Online]. Available: https://www.gps.gov/systems/gps/performance/accuracy/. [Accessed 11 9 2019].

[10] "Explanation of Latitude and Longitude," [Online]. Available: http://www.satsig.net/lat_long.htm.

[11] A. Adiwilaga, "Teori Pengukuran Jarak," 10 September 2015. [Online]. Available: https://blogs.itb.ac.id/anugraha/2014/09/10/teori-pengukuran-jarak/.

[12] R. Dikairono, T. A. Sardjono and L. Yulianto, "Sistem Navigasi dan Penghindar Rintangan Pada Mobile Robot Menggunakan GPS dan Pengukur Jarak Ultrasonik," *JAVA Journal of Electrical and Electronics Engineering,* vol. 11, no. 1, p. 2, 2013.

[13] R. Fernandes, K. Mukambika, S. Priyanka, L. Ranjini and C. Anjanappa, "Digital Compas," *IEEE,* vol. 4, no. Engineering and Technology Research (IJSETR), 2015.

[14] T. Ozyagcilar, "Implementing a Tilt-Compensated eCompass using Accelerometer and Magnetometer Sensors," p. 3, 2015.

[15] I. Laksana, "Rancang Bangun Prototype Magnetic Levitation Sebagai Kontrol Posisi Bola Besi Dengan Menggunakan Metode Fuzzy Logic Control," in *Buku Tugas Akhir*, Bandung, Universitas Telkom, S1 Teknik Elektro, 2016.

[16] J. Yan, M. Ryan and J. Power, "Using Fuzzy Logic," *Prentice-Hall,* 1994.

[17] V. V. Simanjuntak, "ANALISIS DC MOTOR PADA APLIKASI PARKIR VERTIKAL OTOMATIS MENGGUNAKAN RFID," *Tugas Akhir Politeknik Negeri Sriwijaya,* pp. 5-8, 2017.

[18] A. Hughes, "Electric Motor and Drivers," Burlington, Elsevier, 2006.

[19] "ARDUINO MEGA 2560 REV3," [Online]. Available: https://store.arduino.cc/usa/mega-2560-r3.

[20] "Forum Arduino," Arduino, [Online]. Available: https://forum.arduino.cc/index.php?topic=125908.0.

[21] D. Nadelkovski, "Arduino DC Motor Control Tutorial," [Online]. Available: https://howtomechatronics.com/tutorials/arduino/arduino-dc-motor-control-tutorial-l298n-pwm-h-bridge/. [Accessed 20 09 2019].

[22] "UART GPS Module," Waveshare, [Online]. Available: https://www.waveshare.com/uart-gps-neo-7m-c.htm. [Accessed 20 09 2019].

[23] D. Liani, A. Silvia and L. , "Sistem Navigasi pada Mobile Robot dengan Global Positioning System (GPS)," *ANNUAL RESEARCH SEMINAR 2016,* vol. 2, no. 1, p. 373, 2016.

[24] R. Siegwart and I. R. Nourbakhsh, Intoduction to Autnomous Mobile Robot, London: The MIT Press, 2004, p. 31.

[25] D. Marchewka and M. Piątek, *Wheeled mobile robot modeling aspects,* Krakow: AGH University of Science and Technology.

[26] S. K. Malu and J. Majumdar, "Kinematics, Localization and Control of Differential Drive," *Global Journal of Researches in Engineering: H Robotics & Nano-Tech,* vol. 14, no. 1, p. 2, 2014.

[27] E. Johnston, "Explanation of Latitude and Longitude," Satellite Signals, 2005. [Online]. Available: http://www.satsig.net/lat_long.htm. [Accessed 27 September 2017].

[28] W. Setiawan, "Cara Kerja GPS," 10 May 2015. [Online]. Available: https://wirasetiawan29.wordpress.com/2015/05/10/cara-kerja-gps/. [Accessed 27 September 2017].

[29] H. M. Himawan, O. Setyawati and H. Suyono, "Pemodelan Fuzzy Logic Control untuk Pengendali PWM," *JNTETI,* vol. 5, no. 1, p. 2, 2016.

[30] R. G. Hasibuan, "Rancang Bangun Kendali Kecepatan Berdasarkan Jarak Pada Mobile Robot Menggunakan Metode Fuzzy Logic," *e-Proceeding of Engineering,* vol. 2, no. 2, p. 1973, 2015.

[31] J.-S. R. Jang, C.-T. Sun and E. Mizutani, "Neuro-Fuzzy and Soft Computing," in *Neuro-Fuzzy and Soft Computing*, Upper Saddle River, Prentice-Hall, 1997, p. 82.

[32] Honeywell, "3-Axis Digital Compass IC," Honeywell International Inc., Plymouth, 2013.

[33] R. Andrianto, "PERANCANGAN SISTEM KENDALI POSISI WAHANA AIR TANPA AWAK MENGGUNAKAN METODE PID," in *Buku Tugas AKhir*, Bandung, Universitas Telkom, S1 Teknik Elektro, 2017, p. 37.

[34] S. Nugroho, "Sistem Navigasi Gerak Roboboat Berdasarkan GPS," in *Buku Tugas Akhir*, Bandung, Universitas Telkom, S1 Teknik Elektro, 2015.

[35] H. A. Kadir, N. H. Darus and K. Isa, "Development of Drifting Buoy Inspired by Water Strider for Shallow Water Environment," in *IEEE*, 2017.

[36] G. Xiaoli, "NXP Community," NXP, 26 9 2012. [Online]. Available: https://community.nxp.com/docs/DOC-1067. [Accessed 18 9 2019].

[37] "Prinsip Kerja Motor DC," Elektronika Dasar, 7 02 2019. [Online]. Available: https://elektronika-dasar.web.id/prinsip-kerja-motor-dc/. [Accessed 18 9 2019].