DAFTAR PUSTAKA

[1]   R. C. Shit, S. Sharma, D. Puthal, and A. Y. Zomaya, "Location of Things (LoT): A review and taxonomy of sensors localization in IoT infrastructure," *IEEE Commun. Surv. Tutorials*, vol. 20, no. 3, pp. 2028–2061, 2018, doi: 10.1109/COMST.2018.2798591.

[2]   A. Basiri *et al.*, "Indoor location based services challenges, requirements and usability of current solutions," *Comput. Sci. Rev.*, vol. 24, no. April, pp. 1–12, 2017, doi: 10.1016/j.cosrev.2017.03.002.

[3]   H. Huang, G. Gartner, J. M. Krisp, M. Raubal, and N. Van de Weghe, "Location based services: ongoing evolution and research agenda," *J. Locat. Based Serv.*, vol. 12, no. 2, pp. 63–93, 2018, doi: 10.1080/17489725.2018.1508763.

[4]   S. Choy, J. Handmer, J. Whittaker, Y. Shinohara, T. Hatori, and N. Kohtake, "Application of satellite navigation system for emergency warning and alerting," *Comput. Environ. Urban Syst.*, vol. 58, pp. 12–18, 2016, doi: 10.1016/j.compenvurbsys.2016.03.003.

[5]   H. Jo, S. Kang, H. J. Kwon, and J. D. Lee, "In-door location-based smart factory cloud platform supporting device-to-device self-collaboration," *2017 IEEE Int. Conf. Big Data Smart Comput. BigComp 2017*, pp. 348–351, 2017, doi: 10.1109/BIGCOMP.2017.7881691.

[6]   R. Mautz, "Overview of current indoor positioning systems," *Geod. Cartogr.*, vol. 35, no. 1, pp. 18–22, 2009, doi: 10.3846/1392-1541.2009.35.18-22.

[7]   R. Mautz, "The challenges of indoor environments and specification on some alternative positioning systems," *Proc. - 6th Work. Positioning, Navig. Commun. WPNC 2009*, vol. 2009, pp. 29–36, 2009, doi: 10.1109/WPNC.2009.4907800.

[8]   A. Hameed and H. A. Ahmed, "Survey on indoor positioning applications

based on different technologies," *12th Int. Conf. Math. Actuar. Sci. Comput. Sci. Stat. MACS 2018 - Proc.*, no. February 2019, 2019, doi: 10.1109/MACS.2018.8628462.

[9]   L. Qin, B. Niu, B. Li, and Y. Du, "Indoor visible light high precision three-dimensional positioning algorithm based on single LED lamp," *Optik (Stuttg).*, vol. 207, no. August 2019, p. 163786, 2020, doi: 10.1016/j.ijleo.2019.163786.

[10] C. Yang and H. Shao, "WiFi-Based Indoor Positioning," no. March, pp. 150–157, 2015.

[11] A. Noertjahyana, I. A. Wijayanto, and J. Andjarwirawan, "Development of mobile indoor positioning system application using android and bluetooth low energy with trilateration method," *Proc. - 2017 Int. Conf. Soft Comput. Intell. Syst. Inf. Technol. Build. Intell. Through IOT Big Data, ICSIIT 2017*, vol. 2018-Janua, pp. 185–189, 2017, doi: 10.1109/ICSIIT.2017.64.

[12] H. Park, J. Noh, and S. Cho, "Three-dimensional positioning system using Bluetooth low-energy beacons," *Int. J. Distrib. Sens. Networks*, vol. 12, no. 10, 2016, doi: 10.1177/1550147716671720.

[13] D. Yan, B. Kang, H. Zhong, and R. Wang, "Research on positioning system based on Zigbee communication," *Proc. 2018 IEEE 3rd Adv. Inf. Technol. Electron. Autom. Control Conf. IAEAC 2018*, no. Iaeac, pp. 1027–1030, 2018, doi: 10.1109/IAEAC.2018.8577263.

[14] M. Scherhäufl, M. Pichler, E. Schimbäck, D. J. Müller, A. Ziroff, and A. Stelzer, "Indoor localization of passive UHF RFID tags based on phase-of-arrival evaluation," *IEEE Trans. Microw. Theory Tech.*, vol. 61, no. 12, pp. 4724–4729, 2013, doi: 10.1109/TMTT.2013.2287183.

[15] D. J. Suroso, M. Arifin, and P. Cherntanomwong, "Distance-based Indoor Localization using Empirical Path Loss Model and RSSI in Wireless Sensor Networks," *J. Robot. Control*, vol. 1, no. 6, pp. 199–207, 2020, doi: 10.18196/jrc.1638.

[16] F. Y. M. Adiyatma, A. E. Kurniawan, D. J. Suroso, and P. Cherntanomwong, "Performance Comparison of Several Range- based Techniques for Indoor

Localization Based on Received Signal Strength Indicator," vol. 7, no. 1, pp. 40–53, 2021, doi: 10.34818/ijoict.v7i1.550.

[17] D. J. Suroso, P. Cherntanomwong, P. Sooraksa, and J. I. Takada, "Location fingerprint technique using Fuzzy C-Means clustering algorithm for indoor localization," *IEEE Reg. 10 Annu. Int. Conf. Proceedings/TENCON*, no. November, pp. 88–92, 2011, doi: 10.1109/TENCON.2011.6129069.

[18] C. L. Tseng, F. Y. Liu, C. H. Lin, and C. Y. Lee, "A hop-count localization method with boundary improvement for wireless sensor networks," *Proc. - 2016 IEEE Int. Symp. Comput. Consum. Control. IS3C 2016*, pp. 18–21, 2016, doi: 10.1109/IS3C.2016.15.

[19] W. Sakpere, M. Adeyeye-Oshin, and N. B. W. Mlitwa, "A state-of-the-art survey of indoor positioning and navigation systems and technologies," *South African Comput. J.*, vol. 29, no. 3, pp. 145–197, 2017, doi: 10.18489/sacj.v29i3.452.

[20] A. Thaljaoui *et al.*, "BLE Localization using RSSI Measurements and iRingLA To cite this version : HAL Id : hal-01387824," *IEEE Int. Conf. Ind. Technol. (ICIT 2015)*, pp. 2178–2183, 2015.

[21] S. He, S. Member, S. G. Chan, and S. Member, "Wi-Fi Fingerprint-Based Indoor Positioning : Recent Advances and Comparisons," vol. 18, no. 1, pp. 466–490, 2016.

[22] P. Cherntanomwong and D. J. Suroso, "Indoor localization system using wireless sensor networks for stationary and moving target," pp. 1–5, 2012, doi: 10.1109/icics.2011.6173554.

[23] A. T. Parameswaran, M. I. Husain, and S. Upadhyaya, "Is RSSI a reliable parameter in sensor localization algorithms - an experimental study," *IEEE Int. Symp. Reliab. Distrib. Syst.*, pp. 1–5, 2009.

[24] A. Bose and H. F. Chuan, "A practical path loss model for indoor WiFi positioning enhancement," *2007 6th Int. Conf. Information, Commun. Signal Process. ICICS*, pp. 0–4, 2007, doi: 10.1109/ICICS.2007.4449717.

[25] E. Goldoni, A. Savioli, M. Risi, and P. Gamba, "Experimental analysis of RSSI-based indoor localization with IEEE 802.15.4," *2010 Eur. Wirel. Conf.*

EW 2010, no. September 2018, pp. 71–77, 2010, doi: 10.1109/EW.2010.5483396.

[26] T. Chuenurajit, D. Suroso, and P. Cherntanomwong, "Implementation of RSSI-Based 3D Indoor Localization using Wireless Sensor Networks Based on ZigBee Standard," *J. Inf. Sci. Technol.*, vol. 3, no. 2, pp. 1–6, 2012.

[27] D. J. Suroso, A. S. H. Rudianto, M. Arifin, and S. Hawibowo, "Random Forest and Interpolation Techniques for Fingerprint- based Indoor Positioning System in Un-ideal Environment," vol. 1, no. 1, 2021.

[28] E. Navarro, B. Peuker, M. Quan, A. C. Clark, and J. Jipson, "Wi-Fi Localization Using RSSI Fingerprinting," *Test*, pp. 1–6, 2010.

[29] W. K. Zegeye, S. B. Amsalu, Y. Astatke, and F. Moazzami, "WiFi RSS fingerprinting indoor localization for mobile devices," *2016 IEEE 7th Annu. Ubiquitous Comput. Electron. Mob. Commun. Conf. UEMCON 2016*, pp. 1–6, 2016, doi: 10.1109/UEMCON.2016.7777834.

[30] E. Jedari, Z. Wu, R. Rashidzadeh, and M. Saif, "Wi-Fi based indoor location positioning employing random forest classifier," *2015 Int. Conf. Indoor Position. Indoor Navig. IPIN 2015*, no. October, pp. 13–16, 2015, doi: 10.1109/IPIN.2015.7346754.

[31] S. S. Jan, S. J. Yeh, and Y. W. Liu, "Received signal strength database interpolation by Kriging for a Wi-Fi indoor positioning system," *Sensors (Switzerland)*, vol. 15, no. 9, pp. 21377–21393, 2015, doi: 10.3390/s150921377.

[32] H. Zhao, B. Huang, and B. Jia, "Applying kriging interpolation for WiFi fingerprinting based indoor positioning systems," *IEEE Wirel. Commun. Netw. Conf. WCNC*, vol. 2016-Septe, no. April 2016, 2016, doi: 10.1109/WCNC.2016.7565018.

[33] S. Ganguly and S. Bhatnagar, *IEEE 802.11 Wireless Networks*, no. April. 2008.

[34] F. Mohammed and A. Al-Raie, "Simulation of Multipath Fading Effects in Mobile Radio Systems," *Microw. J.*, no. October 2010, pp. 1–14, 2016.

[35] R. W. H. Jr., *Introduction to Wireless Digital Communication*. .

[36]   K. Pahlavan and A. H. Levesque, *Wireless Information Networks: Second Edition*. 2005.

[37]   A. F. Molisch, *Wireless Communications*. 2005.

[38]   S. . Saunders and A. Zavala, *Antenna and Propagation for Wireless Communication Systems*. 2007.

[39]   A. Goldsmith, *WIRELESS COMMUNICATIONS*. 2005.

[40]   S. He and S. H. G. Chan, "Wi-Fi fingerprint-based indoor positioning: Recent advances and comparisons," *IEEE Commun. Surv. Tutorials*, vol. 18, no. 1, pp. 466–490, 2016, doi: 10.1109/COMST.2015.2464084.

[41]   Z. Farid, R. Nordin, and M. Ismail, "Recent advances in wireless indoor localization techniques and system," *J. Comput. Networks Commun.*, vol. 2013, 2013, doi: 10.1155/2013/185138.

[42]   D. J. Suroso, P. Cherntanomwong, P. Sooraksa, and J. I. Takada, "Location fingerprint technique using Fuzzy C-Means clustering algorithm for indoor localization," *IEEE Reg. 10 Annu. Int. Conf. Proceedings/TENCON*, pp. 88–92, 2011, doi: 10.1109/TENCON.2011.6129069.

[43]   F. T. Anggraeny and W. J. S. Saputra, "ANALISA PENGUKURAN SIMILARITAS BERDASARKAN JARAK MINIMUM PADA PENGENALAN WAJAH 2D MENGGUNAKAN DIAGONAL PRINCIPAL COMPONENT ANALYSIS," vol. IX, pp. 59–64, 2014.

[44]   N. Roseline, N. Kingdom, and B. W. K., "A Comparative Study of Interpolation Using the Concept of Mathematical Norm With a Proposed Model," *Int. J. Sci. Res. Publ.*, vol. 9, no. 4, p. p8809, 2019, doi: 10.29322/ijsrp.9.04.2019.p8809.

[45]   R. P. C. Chapra Steven, C., *Numerical Methods for Engineers*. 2006.

[46]   C.-E. Froberg, J. Stoer, and R. Bulirsch, "Introduction to Numerical Analysis.," *Math. Comput.*, vol. 37, no. 156, p. 600, 1981, doi: 10.2307/2007454.

[47]   J. Kiusalaas, *Numerical Methods in Engineering with Python 3*. 2013.

[48]   L. Zou, L. Song, X. Wang, T. Weise, Y. Chen, and C. Zhang, "A New Approach to Newton-Type Polynomial Interpolation with Parameters,"

Math. Probl. Eng., vol. 2020, 2020, doi: 10.1155/2020/9020541.

[49] C. D. Biswajit Das, "Lagrange's Interpolation Formula: Representation of Numerical Data by a Polynomial curve," *Int. J. Electron. Appl. Res.*, vol. 3, no. 2, pp. 125–158, 2016, doi: 10.33665/ijear.2016.v03i02.002.

[50] D. V. Lindley, A. Sen, and M. Srivastava, *Regression Analysis: Theory, Methods and Applications*, vol. 75, no. 472. 1991.

[51] E. Ostertagová, "Modelling using polynomial regression," *Procedia Eng.*, vol. 48, pp. 500–506, 2012, doi: 10.1016/j.proeng.2012.09.545.

[52] S. H. M. Arifin, D. J. Suroso, "Perbandingan Hasil Penentuan Posisi Objek dalam Ruangan Menggunakan Metode Trilaterasi dan Metode Min-Max dengan Variasi Jarak Antar Titik Referensi dan Gangguan Keberadaan Manusia," 2020.

[53] Y. Yang *et al.*, "Parallel channel sounder for MIMO channel measurements," *IEEE Wirel. Commun.*, vol. 25, no. 5, pp. 16–21, 2018, doi: 10.1109/MWC.2018.1800042.