DAFTAR PUSTAKA

[1] R. Want, B. N. Schilit and J. Scot, "Enabling the Internet of Things," *Computer*, vol. 48, no. 1, pp. 28-35, 2015.

[2] G. D. Putra, A. R. Pratama, A. Lazovik and M. Aiello, "Comparison of energy consumption in Wi-Fi and bluetooth communication in a Smart Building," in *2017 IEEE 7th Annual Computing and Communication Workshop and Conference (CCWC)*, Las Vegas, 2017.

[3] Bluetooth SIG, Inc., "Bluetooth Markets," Bluetooth SIG, Inc, 2019. [Online]. Available: https://www.bluetooth.com/markets. [Accessed 19 Maret 2019].

[4] S. Millward, "Indonesia to be world's fourth-largest smartphone market by 2018," Tech in Asia, 23 Desember 2014. [Online]. Available: https://www.techinasia.com/indonesia-worlds-fourth-largest-smartphone-2018-surpass-100-million-users. [Accessed 19 Maret 2019].

[5] StatCounter, "Desktop vs Mobile vs Tablet Market Share in Indonesia - February 2019," StatCounter, 2017. [Online]. Available: http://gs.statcounter.com/platform-market-share/desktop-mobile-tablet/indonesia. [Accessed 19 Maret 2019].

[6] W. Borowicz, "How do beacons work? The physics of beacon tech," Estimote, 2 Januari 2015. [Online]. Available: https://blog.estimote.com/post/106913675010/how-do-beacons-work-the-physics-of-beacon-tech. [Accessed 19 Maret 2019].

[7] N. Samama, "Foreword," in *Global Positioning: Technologies and Performance*, New Jersey, A JOHN WILEY & SONS, INC., PUBLICATION, 2008, p. xii.

[8] S. Memon, M. M. Memon, F. K. Shaikh and S. Laghari, "Smart indoor positioning using BLE technology," in *2017 4th IEEE International Conference on Engineering Technologies and Applied Sciences (ICETAS)*, Salmabad, Bahrain, 2017.

[9] A. Isasi, S. Rodriguez, J. L. D. Armentia and A. Villodas, "Location, tracking and identification with RFID and vision data fusion," in *European Workshop on Smart Objects: Systems, Technologies and Applications*, Ciudad, Spain,, 2010.

[10] "Estimote Products," Estimote, Inc., 2019. [Online]. Available: https://estimote.com/products/. [Accessed 29 Maret 2019].

[11] "Estimote Community Portal," Estimote, Inc., 2018. [Online]. Available: https://community.estimote.com/hc/en-us. [Accessed 29 Maret 2019].

[12] D. Fernandez-Llorca, R. Quintero, I. Parra, M. Jimenez, C. Fernandez, R. Izquierdo and M. A. Sotelo, "Comparison between UHF RFID and BLE for Stereo-Based Tag Association in Outdoor Scenarios," in *2016 6th International Conference on IT Convergence and Security (ICITCS)*, Prague, Czech Republic, 2016.

[13] National Coordination Office for Space-Based Positioning, Navigation, and Timing, "GPS Overview," 6 Juni 2017. [Online]. Available: https://www.gps.gov/systems/gps/. [Accessed 29 April 2019].

[14] National Coordination Office for Space-Based Positioning, Navigation, and Timing, "Space Segment," 21 Maret 2019. [Online]. Available: https://www.gps.gov/systems/gps/space/. [Accessed 29 April 2019].

[15] National Coordination Office for Space-Based Positioning, Navigation, and Timin, "Control Segment," 8 November 2018. [Online]. Available: https://www.gps.gov/systems/gps/control/. [Accessed 29 April 2019].

[16] National Coordination Office for Space-Based Positioning, Navigation, and Timing, "GPS Applications," 25 November 2014. [Online]. Available: https://www.gps.gov/applications/. [Accessed 29 April 2019].

[17] National Coordination Office for Space-Based Positioning, Navigation, and Timing, "GPS Educational Poster," 26 September 2016. [Online]. Available: https://www.gps.gov/multimedia/poster/. [Accessed 30 April 2019].

[18] National Coordination Office for Space-Based Positioning, Navigation, and Timing, "GPS Accuracy," 5 Desember 2017. [Online]. Available: https://www.gps.gov/systems/gps/performance/accuracy/. [Accessed 30 April 2019].

[19] J. C. Haartsen, "The Bluetooth radio system," *IEEE Personal Communications*, vol. 7, no. 1, pp. 28-36, 2000.

[20] Bluetooth SIG, Inc., "Bluetooth," Bluetooth SIG, Inc., 2019. [Online]. Available: https://www.bluetooth.com/. [Accessed 30 Juli 2019].

[21] J. Haartsen, "Bluetooth - the universal radio interface for ad hoc, wireless connectivity," *Ericsson review.*, no. 75, pp. 110-117, 1998.

[22] T. S. Tsui and T. G. Clarkson, "Spread-spectrum communication techniques," *Electronics & Communication Engineering Journal* , vol. 6, no. 1, pp. 3-12, 1994.

[23] G. Roth, "Bluetooth Wireless Technology," 22 Mei 2013. [Online]. Available: http://large.stanford.edu/courses/2012/ph250/roth1/. [Accessed 30 Juli 2019].

[24] P. Duhamel and M. Kieffer, Joint Source-Channel Decoding, Academic Press, 2009.

[25] A. Mackey, P. Spachos and K. N. Plataniotis, "Enhanced Indoor Navigation System with Beacons and Kalman Filters," in *IEEE Global Conference on Signal and Information Processing (GlobalSIP)*, Anaheim, 2018.

[26] R. Heydon, Bluetooth Low Energy, Indiana: Pearson Education, Inc., 2012.

[27] R. Faragher and R. Harle, "Location Fingerprinting With Bluetooth Low Energy Beacons," *IEEE Journal on Selected Areas in Communications* , vol. 33, no. 11, pp. 2418 - 2428, 2015.

[28] H. K. Fard, Y. Chen and K. K. Son, "Indoor positioning of mobile devices with agile iBeacon deployment," in *IEEE 28th Canadian Conference on Electrical and Computer Engineering (CCECE)*, Halifax, 2015.

[29] A. Sharma and T. J. Lehman, "Software Development as a Service: Agile Experiences," in *Annual SRII Global Conference*, San Jose, 2011.

[30] W. Enck, M. Ongtang and P. McDaniel, "Understanding Android Security," *IEEE Security & Privacy*, vol. 7, no. 1, pp. 50 - 57, 2009.

[31] B. v. d. Wielen, "Insights into the 2.3 Billion Android Smartphones in Use Around the World," newzoo, 17 Januari 2018. [Online]. Available: https://newzoo.com/insights/articles/insights-into-the-2-3-billion-android-smartphones-in-use-around-the-world/. [Accessed 1 Agustus 2019].

[32] M. Butler, "Android: Changing the Mobile Landscape," *IEEE Pervasive Computing*, vol. 10, no. 1, pp. 4-7, 2011.

[33] M. Sauter, From GSM to LTE: An Introduction to Mobile Networks and Mobile Broadband, Chichester: John Wiley & Sons, Ltd, 2010.

[34] K. Heurtefeux and F. Valois, "Is RSSI a Good Choice for Localization in Wireless Sensor Network?," in *IEEE 26th International Conference on Advanced Information Networking and Applications*, Fukuoka, 2012.

[35] IEEE, "IEEE Xplore," IEEE, 2019. [Online]. Available: https://ieeexplore.ieee.org/Xplore/home.jsp. [Accessed 2 Agustus 2019].

[36] S. Banerji and R. S. Chowdhury, "On IEEE 802.11: Wireless LAN Technology," *International Journal of Mobile Network Communications & Telematics (IJMNCT)* , vol. 3, no. 4, 2013.

[37] J. Bardwell, "Converting Signal Strength Percentage to dBm Values," November 2002. [Online]. Available: http://madwifi-project.org. [Accessed 14 Mei 2019].

[38] R. E. Kalman, "A new approach to linear filtering and prediction problems," *Journal of Fluids Engineering,* vol. 82, no. 1, pp. 35-45, 1960.

[39] Q. Li, R. Li, K. Ji and W. Dai, "Kalman Filter and Its Application," in *8th International Conference on Intelligent Networks and Intelligent Systems (ICINIS)*, Tianjin, 2015.

[40] Q. Dong and W. Dargie, "Evaluation of the reliability of RSSI for indoor localization," in *International Conference on Wireless Communications in Underground and Confined Areas*, Clermont Ferrand, 2012.

[41] T. S. Rappaport, K. Blankenship and H. Xu, "Propagation and radio system design issues in mobile radio systems for the glomo project," in *Rappaport 1997 Propagation AR*, 1997.

[42] M. N. Rahman, M. T. I. A. T. Hanuranto and S. T. M. T. R. Mayasari, "Trilateration and iterative multilateration algorithm for localization schemes on Wireless Sensor Network," in *International Conference on Control, Electronics, Renewable Energy and Communications (ICCREC)*, Yogyakarta, 2017.

[43] A. Noertjahyana, I. A. Wijayanto and J. Andjarwirawan, "Development of Mobile Indoor Positioning System Application Using Android and Bluetooth Low Energy with Trilateration Method," in *International Conference on Soft Computing, Intelligent System and Information Technology (ICSIIT)*, Denpasar, 2017.

[44] S. Subedi, G.-R. Kwon, S. Shin, S.-s. Hwang and J.-Y. Pyun, "Beacon based indoor positioning system using weighted centroid localization approach," in *Eighth International Conference on Ubiquitous and Future Networks (ICUFN)*, Vienna, 2016.

[45] Z. Zuo, L. Liu, L. Zhang and Y. Fang, "Indoor Positioning Based on Bluetooth Low-Energy Beacons Adopting Graph Optimization," *Sensors*, vol. 18, p. 3736, 2018.

[46] A. B. Adege, Y. Yayeh, G. Berie, H.-p. Lin, L. Yen and Y. R. Li, "Indoor localization using K-nearest neighbor and artificial neural network back propagation algorithms," in *27th Wireless and Optical Communication Conference (WOCC)*, Hualien, 2018 .

[47] R. K. Yadav , B. Bhattarai , . H.-S. Gang and J.-Y. Pyun, "Trusted K Nearest Bayesian Estimation for Indoor Positioning System," *IEEE Access,* vol. 7, pp. 51484 - 51498, 2019.

[48] Y. Wang, X. Yang, Y. Zhao, Y. Liu and L. Cuthbert, "Bluetooth positioning using RSSI and triangulation methods," in *IEEE 10th Consumer Communications and Networking Conference (CCNC)*, Las Vegas, 2013.

[49] P. Yonak, "How To Determine Location If You have A Roof Over Your Head," Lemberg, 5 November 2014. [Online]. Available: https://lembergsolutions.com/blog. [Accessed 5 Februari 2020].

[50] W. Bulten, A. C. V. Rossum and W. F. G. Haselager, "Human SLAM, Indoor Localisation of Devices and Users," in *2016 IEEE First International Conference on Internet-of-Things Design and Implementation (IoTDI)*, Berlin, 2016.

[51] W. Bulten, "Lightweight Javascript library for Noise filtering using Kalman filters," 25 September 2015. [Online]. Available: https://www.wouterbulten.nl/blog/tech. [Accessed 10 Desember 2019].

[52] T. S. Rappaport, K. Blankenship and H. Xu, "Propagation and radio system design issues in mobile radio systems for the glomo project," 1997.

[53] E. Adam and A. Rollings, Fundamentals of Game Design, California: Prentice Hall, 2006, p. 67.

[54] S. Tang and M. Hanneghan, "Game Content Model: An Ontology for Documenting Serious," Liverpool John Moores University, Liverpool, 2011.

[55] Z. Zhou and L. Wu, "The Study Of Principles Of Puzzle Game Design," *International Symposium On Information Technology In Medicine And Education*, p. 1, 2012.

[56] R. Wahyudi, "Manisnya Bisnis Game Digital di Indonesia," 2 Oktober 2012. [Online]. Available: http://tekno.kompas.com/read/2012/10/02/16084725.

[57] MoD, "Wikimedia," 2013. [Online]. Available: https://commons.wikimedia.org. [Accessed 19 April 2016].