

DAFTAR PUSTAKA

- [1] B. I. A. Junglas dan R. T. Watson, “*Location-Based Services,*” *Commun. ACM*, vol. 51, no. 3, pp. 65–69, 2008.
- [2] S. Dhar dan U. Varshney, “*Challenges and business models for mobile location-based services and advertising,*” *Commun. ACM*, vol. 54, no. 5, pp. 121–129, 2011.
- [3] H. Sugimoto, *Introduction to GPS*, vol. 72, no. 3. London: Artech House, 2006.
- [4] “Satelit BeiDou Siapkan Layanan GPS versi China ke Seluruh Dunia | Mimbar Publik - Pewarta Informasi Nasional.” <https://www.mimbarpublik.com/2020/12/02/satelit-beidou-siapkan-layanan-gps-versi-china-ke-seluruh-dunia/> (accessed Aug. 15, 2021).
- [5] G. Xu, “*GPS. Theory, algorithms and applications,*” New York: Springer, 2007.
- [6] W. W. Kao and C. L. Tsai, “*Carrier phase indoor positioning using pseudolites and relative movements,*” *J. Chinese Inst. Eng. Trans. Chinese Inst. Eng. A/Chung-kuo K. Ch’eng Hsueh K’an*, vol. 28, no. 5, pp. 899–903, 2005.
- [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.
- [8] V. Kosyanchuk, “*The evolution of indoor navigation technologies - Geoawesomeness,*” 2019. <https://geoawesomeness.com/the-evolution-of-indoor-navigation-technologies/> (accessed Aug. 15, 2021).
- [9] P. Barsocchi *et al.*, “*COVID-19 & privacy: Enhancing of indoor localization architectures towards effective social distancing,*” *Array*, vol. 9, no. November 2020, p. 100051, 2021.
- [10] F. Halawa, H. Dauod, I. G. Lee, Y. Li, S. W. Yoon, and S. H. Chung, “*Introduction of a real time location system to enhance the warehouse safety and operational efficiency,*” *Int. J. Prod. Econ.*, vol. 224, no. June, p.



107541, 2020.

- [11] G. M. Mendoza-Silva, J. Torres-Sospedra, and J. Huerta, “A meta-review of indoor positioning systems,” *Sensors (Switzerland)*, vol. 19, no. 20, 2019.
- [12] D. J. Suroso, M. Arifin, dan 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.
- [13] A. Thaljaoui, T. Val, N. Nasri, dan D. Brulin, “BLE localization using RSSI measurements and iRingLA,” *Proc. IEEE Int. Conf. Ind. Technol.*, vol. 2015-June, no. Juni, pp. 2178–2183, 2015.
- [14] S. Gansemer, U. Großmann, dan S. Hakobyan, “RSSI-based Euclidean distance algorithm for Indoor Positioning adapted for the use in dynamically changing WLAN environments and multi-level buildings,” *2010 Int. Conf. Indoor Position. Indoor Navig. IPIN 2010 - Conf. Proc.*, no. Oktober, 2010.
- [15] M. Arifin, “Perbandingan Hasil Penentuan Posisi Objek Dalam Ruangan Menggunakan Metode Trilaterasi dan Metode Min-Max dengan Variasi Jarak Antar Titik Referensi dan Gangguan Keberadaan Manusia,” Skripsi, Yogyakarta: Universitas Gadjah Mada, 2020.
- [16] S. Subedi dan J. Y. Pyun, “Practical Fingerprinting Localization for Indoor Positioning System by Using Beacons,” *J. Sensors*, 2017.
- [17] F. A. Abdillah, “Prediksi propagasi gelombang radio di lingkungan *microcells* menggunakan metode *ray-tracing*,” Skripsi, Depok: Universitas Indonesia, 2018.
- [18] O. Renaudin, T. Zemen, dan T. Burgess, “Ray-Tracing Based Fingerprinting for Indoor Localization,” *IEEE Work. Signal Process. Adv. Wirel. Commun. SPAWC*, vol. 2018-June, 2018.
- [19] U. Ullah, U. R. Kamboh, F. Hossain, dan M. Danish, “Outdoor-to-Indoor and Indoor-to-Indoor Propagation Path Loss Modeling Using Smart 3D Ray Tracing Algorithm at 28 GHz mmWave.” *Arabian Journal for Science and Engineering*, 45(12), 10223–10232, 2020,
- [20] U. S. Department Of Defense, “Global Positioning System Standard Positioning Service,” *Www.Gps.Gov*, no. September, pp. 1–160, 2008,



- [Online]. Available: <http://www.gps.gov/technical/ps/2008-SPS-performance-standard.pdf>.
- [21] S. Chan dan G. Sohn, “Indoor Localization Using Wi-Fi Based Fingerprinting and Trilateration Techniques for Lbs Applications,” *Int. Arch. Photogramm. Remote Sens. Spat. Inf. Sci.*, vol. XXXVIII-4/, no. November 2015, pp. 1–5, 2012.
- [22] Z. Farid, R. Nordin, dan M. Ismail, “Recent advances in wireless indoor localization techniques and system,” *J. Comput. Networks Commun.*, vol. 2013, 2013.
- [23] T. Kim Geok *et al.*, “Review of Indoor Positioning: Radio Wave Technology,” *Appl. Sci.*, vol. 11, no. 1, p. 279, 2020.
- [24] L. Liyanagedara dan B. Madarasinghe, “Wi-Fi based Positioning system,” no. Oktober 2012, pp. 3–4, 2013, [Online]. Available: <http://dl.lib.mrt.ac.lk/handle/123/8164>.
- [25] S. W. Lee, “Shooting and Bouncing Rays: Calculating the RCS of an Arbitrarily Shaped Cavity,” *IEEE Transactions on Antennas and Propagation*, vol. 37, no. 2. pp. 194–205, 1989.
- [26] S. Y. Seidel dan T. S. Rappaport, “Site-Specific Propagation Prediction for Wireless In-Building Personal Communication System Design,” *IEEE Trans. Veh. Technol.*, vol. 43, no. 4, pp. 879–891, 1994.
- [27] H. Sizun, “Radio Wave Propagation for Telecommunication Applications,” New York: Springer, 2005.
- [28] ITU-R - Radiocommunication Sector of ITU, “Recommendation ITU-R P.2040-1: Effects of building materials and structures on radiowave propagation above about 100 MHz,” *Recomm. ITU-R P.2040*, vol. 1, 2015, [Online]. Available: <http://www.itu.int/rec/R-REC-P.2040-0-201309-I>.
- [29] T. Chai dan R. R. Draxler, “Root mean square error (RMSE) or mean absolute error (MAE)? -Arguments against avoiding RMSE in the literature,” *Geosci. Model Dev.*, vol. 7, no. 3, pp. 1247–1250, 2014.

