

DAFTAR PUSTAKA

- [1] A. R. Musthafa, R. V. H. Ginardi, and F. X. Arunanto, "Sistem Navigasi Indoor Menggunakan Sinyal Wi-fi dan Kompas Digital Berbasis Integrasi dengan Smartphone untuk Studi Kasus pada Gedung Bertingkat," *Jurnal Teknik ITS*, vol. 5, no. 2, pp. 2–6, 2016.
- [2] L. A. Carlson, C. Hölscher, T. F. Shipley, and R. Conory Dalton, "Getting lost in buildings," *Current Directions in Psychological Science*, vol. 19, no. 5, pp. 284–289, 2010.
- [3] S. Haq and C. Zimring, "Just down the road a piece: The development of topological knowledge of building layouts," *Environment and Behavior*, vol. 35, no. 1, pp. 132–160, 2003.
- [4] M. Jacob, S. Schön, U. Weinbach, and T. Kürner, "Ray tracing supported precision evaluation for GPS indoor positioning," *Proceedings of The 6th Workshop on Positioning, Navigation and Communication*, pp. 15–22, 2009.
- [5] B. Zhou and F. Ye, "Explore hidden information for indoor floor plan construction," *IEEE ICC 2017 Next Generation Networking and Internet Symposium*, 2017.
- [6] Brian Moran, "The real challenge for indoor navigation? Map maintenance.," 2017. [Online]. Available: https://medium.com/@brian.moran_91776/the-real-challenge-for-indoor-navigation-map-maintenance-6d3f0ed8a41. [Accessed: 22-Jan-2018].
- [7] M. Masango, F. Mouton, A. Nottingham, and J. Mtsweni, "Context Aware Mobile Application for Mobile Devices," pp. 85–90, 2016.
- [8] Gartner, "Gartner's 2012 Hype Cycle for Emerging Technologies Identifies Tipping Point Technologies That Will Unlock Long-Awaited Technology Scenarios," 2012. [Online]. Available: <https://www.gartner.com/newsroom/id/2124315>. [Accessed: 15-Feb-2018].
- [9] G. Reitmayr *et al.*, "Simultaneous Localization and Mapping for

- Augmented Reality,” *International Symposium on Ubiquitous Virtual Reality*, pp. 5–8, 2010.
- [10] G. D. Bonde *et al.*, “Finding Indoor Position of Person Using Wi-Fi & Smartphone : A Survey,” *International Journal for Innovative Research in Science & Technology*, vol. 1, no. 8, pp. 202–207, 2015.
 - [11] F. Zhou, H. Been-Lirn Duh, and M. Billinghurst, “Trends in AR Tracking, Interaction and Display: A Review of Ten Years of ISMAR,” *IEEE International Symposium on Mixed and Augmented Reality*, pp. 193–202, 2008.
 - [12] K. Liu, G. Motta, and T. Ma, “XYZ indoor navigation through augmented reality: A research in progress,” *IEEE International Conference on Services Computing*, pp. 299–306, 2016.
 - [13] U. Rehman and S. Cao, “Augmented-Reality-Based Indoor Navigation: A Comparative Analysis of Handheld Devices Versus Google Glass,” *IEEE Transactions on Human-Machine Systems*, vol. 47, no. 1, pp. 140–151, 2017.
 - [14] G. Gupta, N. Kejriwal, P. Pallav, E. Hassan, S. Kumar, and R. Hebbalaguppe, “Indoor Localisation and Navigation on Augmented Reality Devices,” *IEEE International Symposium on Mixed and Augmented Reality Adjunct Proceedings*, pp. 107–112, 2017.
 - [15] K. A. Nguyen and Z. Luo, “On Assessing the Positioning Accuracy of Google Tango in Challenging Indoor Environments,” pp. 1–8, 2017.
 - [16] L. S. Liben, L. J. Myers, and K. A. Kastens, “Wayfinding Behavior: Cognitive Mapping and Other Spatial Processes,” *International Conference Spatial Cognition*, pp. 171–187, 2008.
 - [17] T. Ishikawa and K. A. Kastens, “Why some students have trouble with maps and other spatial representations,” *Journal of Geoscience Education*, vol. 53, no. 2, pp. 184–197, 2005.
 - [18] B. C. Langlois, S. Tiku, and S. Pasricha, “Indoor Localization with Smartphones,” *IEEE Consumer Electronics Magazine*, 2017.
 - [19] S. Khruahong, X. Kong, K. Sandrasegaran, and L. Liu, “Multi-level indoor

- navigation ontology for high assurance location-based services,” *IEEE 18th International Symposium on High Assurance Systems Engineering*, pp. 128–131, 2017.
- [20] W. Kang and Y. Han, “SmartPDR: Smartphone-based pedestrian dead reckoning for indoor localization,” *IEEE Sensors Journal*, vol. 15, no. 5, pp. 2906–2916, 2015.
- [21] Z. Guowei, X. Zhan, and L. Dan, “Research and Improvement on Indoor Localization Based on RSSI Fingerprint Database and K-Nearest Neighbor Points,” *International Conference on Communications, Circuits and Systems*, no. 2, pp. 68–71, 2013.
- [22] M. Shchekotov, “Indoor Localization Method Based on Wi-Fi Trilateration Technique,” *Proceeding of The 16th Conference of Fruct Association*, pp. 177–179, 2014.
- [23] M. Granados-cruz, J. Pom, Y. S. Shmaliy, and L. J. Morales-mendoza, “Triangulation-Based Indoor Robot Localization Using Extended FIR / Kalman Filtering,” *11th International Conference on Electrical Engineering, Computing Science and Automatic Control (CCE), 2014 11th Int. Conf.*, pp. 1–5, 2014.
- [24] J. Choi, J. Kim, and N. S. Kim, “Robust Time-Delay Estimation for Acoustic Indoor Localization in Reverberant Environments,” *IEEE Signal Processing Letters*, vol. 24, no. 2, pp. 226–230, 2017.
- [25] C. Piciarelli, “Visual Indoor Localization in Known Environments,” *IEEE Signal Processing Letters*, vol. 23, no. 10, pp. 1330–1334, 2016.
- [26] M. Fadzly, P. Sebastian, and M. Drieberg, “Augmented Reality Assisted Localization for Indoor Navigation on Embedded Computing Platform,” *IEEE International Conference on Signal and Image Processing Applications (ICSIPA)*, pp. 111–116, 2017.
- [27] D. Kalkofen, C. Sandor, S. White, and D. Schmalstieg, “Visualization Techniques for Augmented Reality”, *Handbook of Augmented Reality*, 2011.
- [28] M. Ruta *et al.*, “Indoor / outdoor mobile navigation via knowledge-based

- POI discovery in augmented reality,” *IEEE/WIC/ACM International Conference on Web Intelligence and Intelligent Agent Technology (WI-IAT)*, 2015.
- [29] J. Liang and N. Corso, “Reduced-Complexity Data Acquisition System for Image Based Localization in Indoor Environments,” *International Conference on Indoor Positioning and Indoor Navigation*, pp. 28–31, 2013.
- [30] R. Paucher and M. Turk, “Location-based augmented reality on mobile phones,” *IEEE Computer Society Conference on Computer Vision and Pattern Recognition - Workshops*, pp. 9–16, 2010.
- [31] Google, “Tango Developer Overview | Tango | Google Developers.” [Online]. Available: <https://developers.google.com/tango/developer-overview>. [Accessed: 22-Jan-2018].
- [32] T. Araujo *et al.*, “Life Cycle of a SLAM System: Implementation, Evaluation and Port to the Project Tango Device,” *XVIII Symposium on Virtual and Augmented Reality*, pp. 10–19, 2016.
- [33] J. G. McNeff, “The global positioning system,” *IEEE Transactions On Microwave Theory And Techniques*, vol. 50, no. 3, pp. 645–652, 2002.
- [34] J. Hu, “Wireless Industrial Indoor Localization and Its Application,” 2017.
- [35] KT Ajnas and J. Basheer, “WiFi Based Indoor Positioning System,” pp. 1–76, 2015.
- [36] Shin, Beomju *et al.*, “Enhanced weighted K-nearest neighbor algorithm for indoor Wi-Fi positioning systems,” *8th International Conference on Computing Technology and Information Management (NCM and ICNIT), 2012 8th Int. Conf.*, vol. 1, pp. 515–520, 2012.
- [37] X. Ge and Z. Qu, “Optimization WIFI indoor positioning KNN algorithm location-based fingerprint,” *7th IEEE International Conference on Software Engineering and Service Science (ICSESS)*, pp. 135–137, 2017.
- [38] B. D. A. Smith, “Measuring Direction : Azimuth & Bearing,” *Alabama’s TREASURED Forests*, 2003.
- [39] R. Szeliski, “Computer Vision : Algorithms and Applications,” vol. 5, p. 832, 2010.

- [40] N. Gupta, “Exploring Possible Applications of Augmented Reality in Education,” 4th *International Conference on Signal Processing and Integrated Networks* (SPIN), pp. 437–441, 2017.
- [41] G. Bhorkar, “A Survey of Augmented Reality Navigation,” *In Presence: Teleoperators and Virtual Environments* 6, vol. 4, no. August, pp. 355–385, 2017.
- [42] A. Gherghina, A. Olteanu, and N. Tapus, “A Marker-Based Augmented Reality System for Mobile Devices,” 11th *RoEduNet International Conference*, pp. 1–6, 2013.
- [43] C.W. Chen, W.Z. Chen, J.W. Peng, B.X. Cheng, T.Y. Pan, and H.C. Kuo, “A Real-Time Markerless Augmented Reality Framework Based on SLAM Technique,” 2017 14th *International Symposium on Pervasive Systems, Algorithms and Networks & 2017 11th International Conference on Frontier of Computer Science and Technology & 2017 Third International Symposium of Creative Computing* (ISPAN-FCST-ISCC), pp. 127–132, 2017.
- [44] A. R. Yudiantika, “Pengembangan Metode Visualisasi Kuis Mobile Augmented Reality Berbasis Pelacakan Tanpa Penanda untuk Aplikasi Pembelajaran Museum,” 2015.
- [45] G. Klein and D. Murray, “Parallel Tracking and Mapping for Small AR Workspaces,” 6th *IEEE and ACM International Symposium on Mixed and Augmented Reality*, 2007.
- [46] P. Milgram and F. Kishino, “A Taxonomy of Mixed Reality Visual Displays,” *IEICE Transactions on Information Systems*, no. 12, pp. 1–15, 1994.
- [47] A. C. Frery and T. Perciano, “Introduction to Image Processing Using R,” pp. 21–30, 2013.
- [48] “Arsitektur Platform.” [Online]. Available: <https://developer.android.com/guide/platform/index.html?hl=id#linux-kernel>. [Accessed: 28-Feb-2018].
- [49] Google, “Firebase.” [Online]. Available:

- <https://firebase.google.com/?hl=id>. [Accessed: 24-Jan-2018].
- [50] Nedzad Hamzic, “Using Firebase to provide real-time notifications,” 2017. [Online]. Available: <https://www.atlantbh.com/blog/using-firebase-provide-real-time-notifications/>. [Accessed: 28-Feb-2018].
- [51] T. Blubee, *OpenGL ES 2 for Android*. 2013.
- [52] L. Maxst Co., “MAXST Developers - The Best AR SDK.” [Online]. Available: <https://developer.maxst.com/Features>. [Accessed: 22-Jan-2018].
- [53] Joseph Schmidt, “10 best augmented reality sdk for ar development in 2017.” [Online]. Available: <https://thinkmobiles.com/blog/best-ar-sdk-review/#an-9>. [Accessed: 25-Jan-2018].
- [54] Google, “Android Developer Fundamentals Course,” 2016.
- [55] S. Hassan, U. Qamar, and M. A. Idris, “Purification of requirement engineering model for rapid application development,” 6th *IEEE International Conference on Software Engineering and Service Science (ICSESS)*, pp. 357–362, 2015.
- [56] A. Setiawan, D. Endrawan, R. Fathoni, and S. B. P, “Rapid Application Development,” pp. 1–12, 2011.
- [57] S. Dharwiyanti and R. S. Wahono, “Pengantar Unified Modeling Language (UML),” pp. 1–13, 2003.
- [58] I. Jovanovic, “Software Testing Methods and Techniques,” vol. 5, no. 1, pp. 30–41, 2009.
- [59] L. Williams, “Testing Overview and Black-Box Testing Techniques,” 2006.
- [60] B. S. Nasional, “Konservasi Energi Pada Sistem Pencahayaan,” 2011.
- [61] T. Bailey and H. Durrant-Whyte, “Simultaneous Localisation and Mapping (SLAM) Part 2: State of The Art,” *IEEE Robotics & Automation Magazine*, vol. 13, pp. 108–117, 2006.