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- [11] F. Subhan, H. Hasbullah, A. Rozyyev, and S. T. Bakhsh, “Indoor positioning in bluetooth networks using fingerprinting and lateration approach,” in *Information Science and Applications (ICISA), 2011 International Conference on*. IEEE, 2011, pp. 1–9.
- [12] D. Vasisht, S. Kumar, and D. Katabi, “Decimeter-level localization with a single wifi access point,” in *13th USENIX Symposium on Networked Systems Design and Implementation (NSDI 16)*, 2016, pp. 165–178.
- [13] Z. Sahinoglu, S. Gezici, and I. Guvenc, “Ultra-wideband positioning systems,” Cambridge, New York, 2008.
- [14] C. Medina, J. C. Segura, and A. De la Torre, “Ultrasound indoor positioning system based on a low-power wireless sensor network providing sub-centimeter accuracy,” *Sensors*, vol. 13, no. 3, pp. 3501–3526, 2013.
- [15] R. Harle, “A survey of indoor inertial positioning systems for pedestri- ans,” *Communications Surveys & Tutorials*, IEEE, vol. 15, no. 3, pp. 1281–1293, 2013.
- [16] M. Serraõ, J. M. Rodrigues, J. Rodrigues, and J. H. du Buf, “Indoor localization and navigation for blind persons using visual landmarks and a gis,” *Procedia Computer Science*, vol. 14, pp. 65–73, 2012.
- [17] N. U. Hassan, A. Naeem, M. A. Pasha, T. Jadoon, and C. Yuen, “Indoor positioning using visible led lights: A survey,” *ACM Comput. Surv.*, vol. 48, no. 2, pp. 20:1–20:32, Nov. 2015.
- [18] R. Hansen, B. Thomsen, L. L. Thomsen, and F. S. Adamsen, “Smartcampusaau—an open platform enabling indoor positioning and navigation,” in *Mobile Data Management (MDM), 2013 IEEE 14th International Conference on*, vol. 2. IEEE, 2013, pp. 33–38.
- [19] K. J. Li and J. Y. Lee, “Basic concepts of indoor spatial information candidate standard indoorgml and its applications,” *Journal of Korea Spatial Information Society*, vol. 21, no. 3, pp. 1–10, 2013.
- [20] J. Lee, K. Li, S. Zlatanova, T. Kolbe, C. Nagel, and T. Becker, “OgcQR indoorgml,” 2014.