

# An App for IoT based Smart Parking System

Hannah M. Joseph<sup>1</sup> and Aswathy A.L.<sup>2</sup>

M.Tech Student, Department of Computer Science<sup>1</sup>

Assistant Professor, Department of Computer Science<sup>2</sup>

Lourdes Matha College of Science and Technology, Trivandrum, Kerala, India

**Abstract:** *The increase in population has resulted in an increase in the number of automobiles. This has made the task of finding a parking spot difficult. According to recent studies, about 40% of the traffic volume is made up of vehicles cruising to find a parking spot. The aimless drive-in search for a parking spot can result in traffic congestion, an increase in air pollution and wastage of time and fuel. As an effective solution to this issue, a mobile application for smart parking system is suggested. Using this app a registered user can check the slot availability, view the occupancy prediction for a parking area or book a slot in advance. By this means, both energy and time are saved and if this parking system is implemented in shopping areas, institutions, and airports it can facilitate hassle free parking*

**Keywords:** IoT, Android App, Smart Parking.

## REFERENCES

- [1] Canli, H. and Toklu, S., 2021. Deep learning-based mobile application design for smart parking. IEEE Access, 9, pp.61171-61183.
- [2] Anand, A., Kumar, A., Rao, A.M., Ankesh, A. and Raj, A., 2020, December. Smart Parking System (S-Park)—A Novel Application to Provide Real-Time Parking Solution. In 2020 Third International Conference on Multimedia Processing, Communication & Information Technology (MPCIT) (pp. 93-96). IEEE.
- [3] Rizvi, S.F.H., Shams, R., Fattani, M.T. and Siddique, A.A., 2022, February. A Cloud Based Smart Parking System. In 2022 Global Conference on Wireless and Optical Technologies (GCWOT) (pp. 1-5). IEEE.
- [4] Elakya R, Juhi Seth, Pola Ashritha, R Namith, Smart Parking System using IoT.
- [5] Pomaji, A., Boinwad, S., Wankhede, S., Singh, P. and Dhakulkar, B., 2019. Smart parking management system.
- [6] Ismail, M.M.S., Jusoh, M., Sabapathy, T., Osman, M.N., Rahim, H.A., Yasin, M.N.M. and Fazilah, A.F.M., 2019, December. IoT Based Smart Parking System. In Journal of Physics: Conference Series (Vol. 1424, No. 1, p. 012021). IOP Publishing
- [7] Anusha, A.M., Anushri, G.B. and Hegde, M.D., 2019. Review paper on Smart Parking system. International Journal of Engineering Research & Technology, 7(08).
- [8] Idris, M.I., Leng, Y.Y., Tamil, E.M., Noor, N.M. and Razak, Z., 2009. Car park system: A review of smart parking system and its technology. Information technology journal, 8(2), pp.101-113.
- [9] Fahim, A., Hasan, M. and Chowdhury, M.A., 2021. Smart parking systems: comprehensive review based on various aspects. Heliyon, 7(5), p.e07050.
- [10] Al Qaidhi, W.Z. and Sohail, M., 2019. Smart parking system using IOT. Journal of Student Research.