Asian Journal of Research in Social Sciences and Humanities

Asian Research consortium

www.aijsh.com

ISSN: 2249-7315
Vol. 11, Issue 10, October 2021
SJIF –Impact Factor = 8.037 (2021)
DOI: 10.5958/2249-7315.2021.00108.8

A REVIEW ON SMART PUBLIC TRANSPORT SYSTEM BASED ON IOT

Dr. Priyank Singhal*

*Faculty of Engineering, Teerthanker Mahaveer University,
Moradabad, Uttar Pradesh, INDIA
Email id: priyanksinghal1@gmail.com

ABSTRACT

Intelligent Transportation Systems (ITS) includes a subsystem called Smart Public Transportation (SPT) (ITS). It has the ability to intelligently manage public transportation systems in order to maintain their operation and to provide customers with information about excursions and system operating conditions (travelers and leaders). Rapid advancements in equipment, programming, and communication technologies have aided the development of Internet-connected gadgets that provide perceptions and data collecting from the current world. This article examines the survey approach for IoT-based smart public transportation and different methods for intelligent transportation systems. The findings of this study show that while IoT has prioritized safety in preventing road accidents, it has yet to be addressed how an intelligent vehicle system can be implemented by integrating bus work schedules, bus presence detection, and passenger disbursement efficiency through a booking seat process to minimize congestion as well as passenger waiting time. This study proposes breakthroughs that combine the Internet concept with the integration of systems of industrial actors required in order to harness the energy of IoT for various conveniences, particularly in the field of public transportation, as well as produce an intelligent transportation system, and is one of the smart urban concept indicators. The purpose of this article is to look at various ITS designs and models, as well as survey them to learn more about their architecture. It will reveal knowledge gaps that may be investigated further. The article includes studies into a variety of frameworks, as well as potential extensions in the area to make it simpler to use.

KEYWORDS: *Public Transport, GPS, Android, Web Server, ITS, Network, ICT, RFID, Intelligent System*

REFERENCES

1. M. Alam, J. Ferreira, S. Mumtaz, M. A. Jan, R. Rebelo, and J. A. Fonseca, “Smart Cameras Are Making Our Beaches Safer: A 5G-Envisioned Distributed Architecture for Safe, Connected Coastal Areas,” *IEEE Veh. Technol. Mag.*, 2017, doi: 10.1109/MVT.2017.2753540.
2. H. Begur *et al.*, “An edge-based smart mobile service system for illegal dumping detection and monitoring in San Jose,” 2018, doi: 10.1109/UIC-ATC.2017.8397575.
3. C. IVANUS and Ş. IOVAN, “Internet of Things and Business Process Managemet.,”

Fiability Durab. / Fiabil. si Durabilitate, 2016.

4. G. Gao, Y. Jia, and K. Xiao, "An IOT-based multi-sensor ecological shared farmland management system," *Int. J. Online Eng.*, 2018, doi: 10.3991/ijoe.v14i03.8199.

5. "SMARTGREENS 2016 - Proceedings of the 5th International Conference on Smart Cities and Green ICT Systems," *SMARTGREENS 2016 - Proceedings of the 5th International Conference on Smart Cities and Green ICT Systems*. 2016.

6. B. Pokric, S. Krco, and M. Pokric, "Augmented reality based smart city services using secure IoT infrastructure," 2014, doi: 10.1109/WAINA.2014.127.

7. D. F. Murad, B. S. Abbas, A. Trisetyarso, W. Suparta, and C. H. Kang, "Development of smart public transportation system in Jakarta city based on integrated IoT platform," 2018, doi: 10.1109/ICOIACT.2018.8350812.

8. R. N. Are, R. D. Prasad, P. R. L. R. L. Babu, D. Ram Babu, and P. Gopi Krishna, "IoT based smart system for avoidance of fire accidents on running buses," *Int. J. Eng. Technol.*, 2018, doi: 10.14419/ijet.v7i3.12.16174.

9. S. Vidyasagaran, S. R. Devi, A. Varma, A. Rajesh, and H. Charan, "A low cost IoT based crowd management system for public transport," 2018, doi: 10.1109/ICICI.2017.8365342.

10. S. H. Sutar, R. Koul, and R. Suryavanshi, "Integration of Smart Phone and IOT for development of smart public transportation system," 2016, doi: 10.1109/IOTA.2016.7562698.