

IoT Based Intelligent Transportation System (IoT-ITS) for Global Perspective: A Case Study

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Abstract: Internet of Things (IOT) is the network of physical objects that contain embedded technology to communicate and sense or interact with their internal states or the external environment and transfers data over a network without requiring human-to-human or human-to-computer interaction.

This paper presents a highly sensitive and more secure management system for bus transport with a help of PIC microcontroller and various sensors. The proposed system provides information regarding moving bus to the owner of bus who is located outside the bus based on IOT. Major aim is to transport information like number of non-ticket holders in a bus, accident occurring places, location of moving bus, fuel level in bus and running speed of bus, pressure level in tires to a bus owner who is outside the bus based on IOT.

Keywords: Internet of Things, Transportation Management, GPS Location Tracking, GSM, Accident Alert.

REFERENCES

- [1] Aishwarya S.R, Ashish Rai, Charitha, Prasanth M.A, and Savitha S.C “An IoT based vehicle accident prevention and tracking system for night drivers” proc. IEEE, vol.3, no.4, pp.2320-9798 2015.
- [2] Sadhana B Shabrin, Bhagyashree Jagadish Nikharge, Maithri M Poojary and T Pooja, “Smart helmet-intelligent safety for motorcyclist using raspberry pi and open CV”, proc. IEEE, vol.03, no.03 pp.2395-0056 2016
- [3] Jagdish A. Patel, Aringale Shubhangi, Shweta Joshi, Aarti Pawar and Namrata Bari discussed on “Raspberry Pi based smart home”, Proc. IEEE, vol.6, no.3, pp.2321-3361 2016
- [4] Dr. pankaj Tomar and preeti Mehta focused on “An Efficient Management System based on Face Recognition using Matlab and Raspberry Pi 2”, Proc-IEEE, vol.3, no.5, pp.239 2016
- [5] T. Anitha and T. Uppalaigh focused on “Android based home automation using Raspberry pi”, Proc-IEEE, vol.04, no.01, pp-2351-8665 2016
- [6] M. Patil, A. Rawat, P. Singh, S. Dixit, “Accident Detection and Ambulance Control using Intelligent Traffic Control System”, International Journal of Engineering Trends and Technology (IJETT) ,34(8), pp.400-404,2016.
- [7] N. Chaturvedi, P. Srivastava, “Automatic Vehicle Accident Detection and Messaging System Using GPS and GSM Modems”, International Journal of Scientific & Engineering Research, 4(8), pp. 252-254,2013.
- [8] V. Govindaraj, K. Venkatesan, K. Seethapathy, S. Suthanthiram, S. Alagarsamy, A. Thiyagarajan, “An Imitating Wearable Kidney: A Dialectical Replacement for The Cumbersome Dialysis Procedure for Renal Failures,” Journal of Advanced Science and Technology, 29(7s), pp. 2932-2940,2020.