VISUAL AND GEOLOCATION ENABLED WIRELESS EMERGENCY NOTIFICATION SYSTEM USING EMBEDDED INTERNET OF THING DEVICE

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ABSTRACT

This project developed an intelligent street light with several smart features such as, WI-FI module, GPS, and HD Camera. The biggest problem that contributes to the existence of this technology is to upgrade the system from manual to automatic system by eliminates the hotline calls between citizen and emergency responder. In order to achieve the Internet Telecommunication Union (ITU) standard requirement toward Smart city, using Internet of Thing is one of the requirement. For system improvement, this research is focusing to automate all the manual system (hotline call method) to online based method using Raspberry Pi 3. The main system are using WI-FI module and a few features such as GPS is for location and co-ordinate while the HD Camera is function is to live stream the accident through the monitoring website for reporting to the rescue team. Overall view of the project is positive impact is making thing more easier and value added to the citizens because system is automated and it can be contribute to the any contractor that relate with engineering and construction company , emergency responder (MERS 999) and any others company that involve with government project. As a result, the comparison between manual system and the propose system is improved 88.8 %. The result shows that the improvement is beyond 50%. Overall system has the ability to contributed positive impact to societies and can benefit the citizens in term manual system transform into automatic system which all the system can be operate automatically and user friendly.

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