

Informatics Institute of Technology

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Accidents Avoiding System For Pedestrians using Android app and IOT device

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Abstract

Day by day, the safety standards of vehicles are uplifted, but what about pedestrian safety? There is very little or no precautions taken to improve pedestrian safety. One of the most common reasons for pedestrians to get involved in street accidents are due to the use of mobile phones and walking simultaneously (distracted walking/waxing). It is like Smartphone zombies. This research therefore, takes a stand in looking into the depths of pedestrian safety, tries to appropriate a solution and analyses existing solutions in the same research area.

During the past few years there has been a promising increase in the application of Internet Of Things (IOT) and the implementation of IOT on mobile and web applications. At the starting stages they were concerned about innovations, however now focus is realized in the accuracy. Further, there are quite an amount of applications and devices in this area, which will be made use of in providing the solution.

Here, the solution for proposed system will be an infusion between android mobile application and IOT device, which as a core function will implement the detection of objects and inform the user of any oncoming threats. Further functions and added calculations will be carried out depending on that. Alongside the ability to track oncoming vehicles, there is also an implementation of location tracking function, which will calculate and identify whether the pedestrian/user is on a road or not. However, there is no server side for these functions, since all data is received by the IOT device.

The following research will portray future developments and observe conclusions. This project is not for encourage people for distracted walking. This is focused only for safety.

Subject Descriptors:

Hardware~Sensor applications and deployments Hardware~Sensor devices and platforms B.7: Integrated circuits B.7.0: Genaral B.7.m: Miscellaneous

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