IOT –EYE DROWSINESS DETECTION SYSTEM BY USING INTEL EDISON WITH GPS NAVIGATION

Auni Syahirah Binti Abu Bakar, Goh Khai Shan, Gan Lai Ta, Rohana Abdul Karim

Faculty of Electrical & Electronics Engineering,
Universiti Malaysia Pahang, 26600 Pekan, Pahang, Malaysia
rohanaak@ump.edu.my

Abstract.
The number of traffic accidents continues to increase due to the driver's fatigue has become a serious problem to the society especially for the driver who drove for long distance. Technology in digital computer system allows us to create a drowsiness detection system. Studies for drowsiness detector system has focused on development of computer vision algorithm and lack of Internet of Things (IoT) and notification system, either awake or sleep or might involve in accident, and current location. Thus, we decide to develop a drowsiness detection system with notification of accident and the location by using Global Positioning System (GPS) navigation. In this system, if the driver's eyes are closed about more than 4 seconds, the driver consider as drowsy and an alarm system will be activated to warn the driver and notify the status and location to relative for further action via message (SMS).

Keywords: eye drowsiness,intel edison,GPS navigation,Iot, smartphone setup