

ABSTRACT

As we know, accidents while driving can causes injury and even death. One of the death factors on the highway is not quickly responsive to accident handling due to lack of information. The occurrence of accidents on the highway to be discussed of this research on the design about monitoring system and prototype to sending an accident information to the police and nearest hospital from the crash site.

In this final project, intelligent car prototypes were created to detect accidents and send information accessible to police and nearby hospitals from the crash site. This prototype uses accident sensors for detection some pressure, then teh data sensor processed by arduino will be sent to cloude using wireless communication by xbee module. the information stored on the cloude server and the information can be accessed through the internet network.

The results of this research is cloud can receive the information from en node with maximum ranges 98 meter from coordinator node with maximum time at the distance is 0,38 second and average time sending to cloud is 0,4 second.

Keyword : collision detection, Wireless Sensor Network, Xbee Series 2, Internet of Things.