Abstract

Roads are usually damaged in every area and any damage of the road certainly cause a vibration. In the field of computer technology there are sensors that can be used to detect damaged road, one of them is accelerometer. Accelerometer is a sensor contained in the smartphone and can read the vibration of the smartphone. Based on the how it works, accelerometer can be used to detect damaged road. Currently, to detect damaged road can use manual methods such as human checking and industrial tools. Generate survey data from the method and report to the government center. However, there are some sensors embedded in the mobile device that are used to track, read and get the value from the sensor. In this minor thesis, will propose a method to get the value of damaged road using the accelerometer sensor on the smartphone. This experiments show that these sensors are capable of detecting vibrations using threshold in the application and tested on scooter without any additional industrial tools.

Keywords: Damaged Road, Accelerometer ,Sensors, Mobile devices.