

Abstract

Road Potholes are very disturbing for road users. It is starting from vehicle problems such as vehicle height, vehicle shape, vehicle size to issues on the road field such as small hole dimension to significant dimension and hole depth. Without knowing the terrain on the road, the driver of the vehicle will have no trouble avoiding the road holes. So we need a system to find out where the road holes are. With the IMU (Inertial Measurement Unit) to obtain data, the data is used to obtain information on each axis so that the data can be analyzed and it knows whether the area passed is a hole or not. Data obtained from the accelerometer sensor processed into distance data and hole depth data is equipped with GPS data so that the location of the hole data obtained. The MSE value obtained for depth calculation is 10,46764 while the MSE value for hole length calculation is 16,72952.

Keyword: IMU (Inertial Measurement Unit), Road pothole