

ABSTRACT

In the rainy season the road will be wet, slippery and there is a pool of water in these conditions the potential for accidents is very high so drivers must be careful. Water on the road causes aquaplaning which is where the tire's condition seems to float because there is so much water in the tire tread groove and cannot be discharged completely that the tire loses traction on the road surface or the position of the tire does not touch the asphalt [1]. One example of the danger of aquaplaning is the single accident experienced by a driver from Canterbury England with a Mazda RX-8 car where the driver drove a car with a speed of 70 MPH and crashed into the embankment and suffered severe damage [2]. To solve this problem the author designed a tool to find out whether the road is dry or wet on the road using a soil moisture sensor that is validated with a weather station and uses a fuzzy logic method to make decisions safe to pass, cautious or dangerous. The results of experiments that the author has done fuzzy can classify well and the results are sent to thingspeak.

Keyword: road wetness measurement, fuzzy logic