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Adaptive Speed Control in Vehicles via Zone Recognition

Medhankar Thamke[1], Bhushan Bholankar[2], Harshdip Thakare[3]
Danish Abdul[4], Vedant Nachankar[5]
Students, B. E. Electronics and Telecommunication[1-5]
P. R. Pote Patil College of Engineering and Management, Amravati, India

Abstract: *In today's modern world, where we are using vehicle in every aspect of our life whether it be to transfer the packages, or travelling. Vehicles have made our life easy. But with this, there comes the problem of how to keep this beautiful machine safe for our human need, over speeding which is cause of 70% road accident. It becomes the challenge to tackle this problem. There are several techniques which has been implemented but each technique has some drawback. Some examples of speed limiting technique include Manual Speed Enforcement, vehicle-to-infrastructure (V2I) communication etc. Our project provides the approach of combining various techniques and implementing it to provide best possible output. The principle of our project is to implement the speed limiting zone, this zone acts as the area where the speed of vehicle cannot cross the set value, we implemented this result on small scale using the two NRF24L01 sensors, one connected to the motor driver (which acts as engine) once these two NRF24L01 comes under each other range nrf sensor which is connected to motor driver reduces the speed of the rc car, to form this connection and sending data we are using Arduino UNO, ESP8266 which can be connected to internet*

Keywords: NRF24L01, Arduino UNO, ESP8266, vehicle-to-infrastructure (V2I)

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