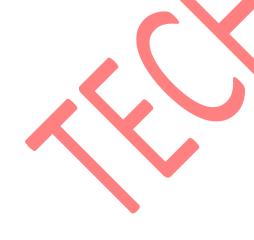# TCP/IP BASED CRUISE CONTROL IN TRAFFIC SITUATION USING RASPBERRY PI

ABSTRACT

This paper deals with the design of new cruise control systems that can help in safe maneuver in traffic condition. It consists of two Raspberry Pi's, one act as slave and other controller as a master. Slave consists of different sensor network like accelerometer, ultrasonic sensor and humidity sensor. It consist RPM meter to gauge the recurrence of revolution of vehicle's wheel and GPS module to calculate geographical location. Using TCP/IP protocol slave module transmit the data i.e. from accelerometer, ultrasonic sensor, GPS module, humidity sensor to the master module on the other end. The values of the sensors should be less than the threshold value ,if it raise above the threshold then the PWM pulse that is generated by the master will automatically slow down the speed of the DC motor of the vehicle, this can be graphically shown on the monitor/display.The values of the sensors are displayed on the LCD.