EMERGENCY ASSISTANCE SYSTEM FOR VEHICLES

Submitted in partial fulfillment of the requirements

of the degree of

Bachelor of Engineering

By

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PROJECT REPORT APPROVAL FOR BACHELOR OF ENGINEERING

This Project Report entitled **Emergency assistance system for vehicles** by **Amey Bhole**, **Parveen Kumar Nagel** and **Kedar Patil** is approved for the degree of **Bachelor of Engineering in Computer Engineering.**

Examiners

1. _____

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Supervisors/ Guides

1. _____

2. _____

Head of Department

1. _____

Principal

1. _____

Date:_____

Place: Mumbai

DECLARATION

We declare that this written submission represents our ideas in our own words and where others' ideas or words have been included, we have adequately cited and referenced the original sources. We also declare that we have adhered to all principles of academic honesty and integrity and have not misrepresented or fabricated or falsified any idea/data/fact/source in our submission. We understand that any violation of the above will be cause for disciplinary action by the Institute and can also evoke penal action from the sources which have thus not been properly cited or from whom proper permission has not been taken when needed.

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ABSTRACT

In this work using Raspberry pi, accelerometer sensor and GPS tracking, a system is developed for providing emergency assistance to people who are met with accidents. This system consists of cooperative components of an accelerometer, raspberry pi, GPS device and GSM module. In the event of accident, this system will send short message to driver's family members indicating the position of vehicle with the help of GPS system and a SMS with the accident location. A threshold of accelerometer is used to determine accident in real-time. The system is compact and easy to install. MEMS inertial sensors are designed to sense a change in an object's inertia, and it measure changes in vibration, orientation and inclination which will be used for detection of accidents. This system also measures distance using Ultrasonic sensors and will indicate the driver about distance from objects in rear end and front end with the help of a voice message. This system also contains a media centre which can be used to play and view most videos, music, podcast's, and other digital media files.

ACKNOWLEDGEMENT

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TABLE OF CONTENTS

TABLE OF FIGURES