VISVESVARAYA TECHNOLOGICAL UNIVERSITY
"Jnana Sangama", Belagavi-590018

Mini Project Report (18ECMP68)

on

IMPLEMENTATION OF IOT BASED ACCIDENT PREVENTION AND DETECTION SYSTEM

Submitted by

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In partial fulfillment of the requirement for the degree of

BACHELOR OF ENGINEERING
In
ELECTRONICS & COMMUNICATION ENGINEERING
Visvesvaraya Technological University, Belagavi

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CERTIFICATE

This is to certify that the mini project work entitled **"IMPLEMENTATION OF IOT BASED ACCIDENT PREVENTION SYSTEM"** carried out by **MEDHA R (1DT19EC045), NADEEM ABDUL RAZAK GULAM (1DT19EC048), NEHA PANDEY (1DT19EC051), RAKSHITH V K (1DT19EC060),** a bonafide student of **DAYANANDA SAGAR ACADEMY OF TECHNOLOGY AND MANAGEMENT** in **Bachelor of Engineering in Electronics and Communication Engineering** of the **Visvesvaraya Technological University, Belagavi** during the year 2021-2022. It is certified that all corrections/suggestions indicated for Internal Assessment have been incorporated in the report deposited in the departmental library. The project report has been approved as it satisfies the academic requirements in respect of project work prescribed for the said degree.

Signature of the Guide   Signature of the Coordinators   Signature of the HOD

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Yours Sincerely
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ABSTRACT

With the increase in the number of bikes and motorcycles, there has been an alarming increase in the rate of road accidents. A smart helmet with embedded electronics is a unique concept that makes motorcycle driving safer than ever before, and it is implemented utilizing GSM and GPS technology. The operation of this smart helmet is straightforward. Vibration sensors are strategically placed in various locations on the helmet where there is a higher chance of being hit, and they are connected to the microcontroller board. When the rider falls and the helmet hits the ground, the microcontroller board detects and transmits the signal, which is then used to extract GPS data using the GPS module that is interfaced to the microcontroller.

The GSM module automatically sends a message to an ambulance or family members when the data exceeds the minimal stress level.

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