Secret MindTech

324, The Grand Plaza, VIP Road, Vesu, Surat

Date: Sep 02,2019

To:
Dr. Mayur S Katore, Prof. Manish Pandit, Prof. Uttam Kumar
Assistant Professor,
School of Engineering
Ajeenkya DY Patil University, D Y Patil Knowledge City,
Charholi Bk. Via Lohegaon, Pune – 412105

Subject: Approval of Research Project Titled "Anti-Accident System to Detect Driver Drowsiness Integrated with Alerting Device"

Dear Dr. Dr. Mayur S Katore,

We are pleased to inform you that your research proposal titled “Anti-Accident System to Detect Driver Drowsiness Integrated with Alerting Device” has been thoroughly reviewed and approved by the research committee. This research project has been recognized for its potential to significantly enhance road safety by addressing one of the major causes of vehicular accidents—driver drowsiness.

After a comprehensive evaluation of your research plan, we are pleased to approve a total project budget of INR 30,00,000 (Thirty Lakh) and a duration of 24 months for the successful completion of the project.

Project Overview

The approved research aims to develop an advanced anti-accident system designed to detect early signs of driver drowsiness using real-time monitoring technologies and immediately alert the driver via integrated warning mechanisms. The system will employ a combination of visual, physiological, and behavioral cues to assess driver fatigue levels. Key features of the project include:

- Driver Monitoring System (DMS): Utilization of facial recognition and eye-tracking technologies to detect signs of fatigue, including slow blink rates, drooping eyelids, and head nodding.
- Physiological Sensors: Integration of heart rate and pulse sensors to detect irregularities in the driver’s physical condition, signaling potential drowsiness.
- Alerting Mechanism: Deployment of an alert system—audible alarms, seat vibrations, and dashboard indicators—triggered when drowsiness is detected.

- Data Analysis and Feedback: Development of software to analyze collected data, providing predictive insights on the driver's condition and customizing the alerting response.

This research holds significant promise for applications in automotive safety, with potential adoption by vehicle manufacturers, transportation companies, and the general public.

Project Duration

The project duration has been approved for a total period of 24 months, beginning from the project initiation date. This timeline is established based on the complexity of system development, testing, and refinement required to ensure reliable performance under diverse driving conditions.

During this period, we request that you submit interim progress reports every six months to ensure that the project remains on track in terms of both technical milestones and budget utilization. Additionally, a final report outlining the research outcomes and key findings will be required at the conclusion of the project.

Expectations and Compliance

We trust that the allocated funds will be utilized in accordance with the institution's research funding guidelines. It is crucial that all expenses are documented, and any deviations from the approved budget allocation should be communicated in advance for prior approval.

The institution anticipates that the outcomes of this research will provide valuable insights into improving vehicular safety through innovative drowsiness detection technologies. If you require any further clarification or assistance, please feel free to contact the research office. We look forward to your progress and the successful execution of the project.

Regards,

Mr. Jayraj Kapdia
Co-Founder