

A Minor Project Report

On

ALCOHOL DRIVE ENGINE LOCKING SYSTEM

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Under the guidance of

MRS. S .LAVANYA

(ASSISTANT PROFESSOR / AI)

Submitted By

V S ASWINSIDHARTH 927621BAD005

R DHARANI DHARAN 927621BAD009

S SANJAY 927621BAD044

T THANISH SURIYA 927621BAD058

DEPARTMENT OF ARTIFICIAL INTELLIGENCE

AND DATA SCIENCE

M.KUMARASAMY COLLEGE OF ENGINEERING

(Autonomous)

KARUR – 639113

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M.KUMARASAMY COLLEGE OF ENGINEERING

(Autonomous Institution affiliated to Anna University, Chennai)

BONAFIDE CERTIFICATE

Certified that this project report “FOOTBOARD ACCIDENT PEVENTION SYSTEM” is the bonfire work of “ASWIN SIDHARTH V S (927621BAD005), DHARANI DHARAN R (927621BAD009), SANJAY S (927621BAD044) ,THANISH SURIYA T (927621BAD058)who carried out the minor project work during the academic year 2023 under our supervision. Certified further, that to the best of our knowledge the work reported herein does not form part of any other minor project report or dissertation on the basis of which a degree or award was conferred on an earlier occasion on this or any other candidate.

Signature

Mrs. R.LAVANYA

Assistant. Prof/AI,

Department of Artificial Intelligence and
Data Science,

M.Kumarasamy College of Engineering,
Thalavapalayam, Karur-639113.

Signature

Dr. N.M. SARAVANA KUMAR

HEAD OF THE DEPARTMENT,

Department of Artificial Intelligence
and Data Science,

M.Kumarasamy College of Engineering,
Thalavapalayam, Karur-639113.

ABSTRACT

The "Alcohol-Activated Engine Locking System" is a sophisticated and innovative project designed to enhance road safety by preventing individuals under the influence of alcohol from operating motor vehicles. This system employs cutting-edge technology to detect alcohol levels in a driver's breath and, if found exceeding permissible limits, automatically locks the vehicle's engine, rendering it immobile.

The core components of the system include a highly sensitive alcohol sensor, a microcontroller unit (MCU), and a motorized locking mechanism integrated with the vehicle's ignition system. The alcohol sensor utilizes advanced detection algorithms to accurately measure the concentration of alcohol in the driver's breath. The MCU processes this information in real-time and triggers the engine lock mechanism when alcohol levels surpass predefined safety thresholds.

To ensure user-friendly operation, the system incorporates a secure and intuitive interface that provides visual and audible warnings to the driver before initiating the engine lock. Additionally, the system is equipped with tamper-resistant features to prevent unauthorized circumvention.

CONCLUSION

In conclusion, implementing an alcohol-driven engine locking system is a crucial step towards enhancing road safety and reducing the incidents of alcohol-impaired driving. By integrating advanced technology that can accurately measure blood alcohol levels and prevent the vehicle from starting if the driver is intoxicated, we can significantly mitigate the risks associated with drunk driving.

This system not only acts as a deterrent to potential offenders but also serves as a proactive measure to protect innocent lives on the road. The social and economic costs of alcohol-related accidents are substantial, and a reliable alcohol drive engine locking system can contribute to the overall well-being of society