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## Vehicle Automatic Alcohol Monitoring and Ignition Control System

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## Abstract

Drunk driving and driving while intoxicated are the main causes of accidents in the modern world. Only drunk driving is a blame for the majority of preventable deaths in the worldwide. The goal of this initiative is to shield the public from needless fatalities brought on by drunk driving related traffic accidents. We have created an automated engine locking mechanism for this project that uses alcohol breath as its input. The alcohol sensor MQ3, DC motor, and Arduino UNO are used in the project. The purpose of alcohol detection in the vehicle is to protect those who are seated inside. The alcohol content is detected using the alcohol sensor MQ3, and the detected signal is transformed into a digital signal that is directly managed by the micro-controller unit (MCU). The digital signal indicates that the vehicle is automatically controlled and cannot be driven by a driver who has consumed alcohol. This prevents drunk driving incidents.

## **Keywords**

Drunk and Driving, alcohol sensor (MQ3), DC Motor, Arduino UNO, Micro Controller Unit (MCU).

## **Biographies**

**Utharpally Srikanth** is currently a UG student at the Department of Electrical and Electronics Engineering, BVRIT, Narsapur. His area of interest is in electric vehicles.

- **V. Dhanunjaya** is an Assistant Professor in Electrical and Electronics Engineering at BVRIT, Narsapur. At currently he is pursuing Ph.D. He completed his MTech (Power Electronics) and BTech Electrical Engineering from JNTU Hyderabad. He worked as a Assistant Professor at Aurora Scientific Technology Research Academy, Hyderabad for 2years. Since 2014, he holds Assistant Professor at BVRIT, Narsapur. His research interest is on Power Electronics, electric vehicle (EV) charging and automotive electronics.
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- **Y. Vijay Kumar** graduated with a Bachelor's degree from NITS, Miryalaguda, in 2010. He completed his M. Tech in Power Electronics from SVEC, Suryapet, in 2014. Since 2016, he has been working as an Assistant Professor at B V Raju Institute of Technology (BVRIT), Narsapur, where he contributes to both teaching and research. He is currently pursuing a Ph.D. at NIT Warangal. His research interests include power

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