

**VISVESVARAYA TECHNOLOGICAL UNIVERSITY BELGAUM**



**A DISSERTATION REPORT ON**

**“AVISHKAR”  
- BIKE IGNITION USING HELMET SENSORS**

**Submitted in partial fulfillment of the requirement for the award of the degree**

**BACHELOR OF ENGINEERING  
IN  
ELECTRONICS AND COMMUNICATION**

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## **ABSTRACT**

This project is an advanced thinking which works on the design circuit with basic principles of sensors. The main aim of this project is that if the rider wears the helmet only then the bike should start. This is achieved by using a pressure sensors / impedance sensors in helmet which makes sure that the rider is wearing the helmet. We use accelerometer to determine the position of the helmet in case the rider tries to apply pressure by other means other than wearing helmet and another sensor to measure the distance of helmet from bike (To confirm that the rider is wearing helmet properly). All these signals are fed to the AUDUINO PRO MINI board where the conditions are checked and the signal is passed to RF transmitter which transmits the signal to bike receiver. RF receiver receives the signal and passed to AUDUINO UNO BOARD and then the signal is passed to relay which is used for switching which is connected to ignition switch of the bike.

Only when all the conditions of the signals of helmet are satisfied only then the bike is ready for riding. The theme is 'WEAR HELMET RIDE SAFE, NO HELMET NO VEHICLE'.