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## FINAL YEAR PROJECT

Preference # 1

# IoT Based Smart Helmet for Biker's Safety & Immediate First Aid

## OVERVIEW

Motorcycles contribute to 14% of Traffic worldwide. In 2019, 108 motorcycle riders were killed per billion miles traveled, compared to just two car drivers, 29 cyclists and 35 pedestrians. The motorbike crashes are much more severe than 4 wheel cars due to open exposure to the environment and first aid is very critical in such a situation.

The objective of this Project is to develop an Efficient smart system to ensure bikers safety and first aid by using an Easy-to-Adopt approach for the society. The development focuses on a modular system with a Market ready solution for Biker's safety

## OBJECTIVES

The biker safety helmet is a smart device intended to

### PRIMARY OBJECTIVES

1. Provide alerts to the rider in case of traffic violations
2. Detect & Confirm the Crash by using sensors and smart algorithms
3. Identify the Location of Crash using GPS
4. Report the incident with necessary information to Ambulance / Hospital and other emergency Contact lines.

### SECONDARY OBJECTIVES

5. Mobile app integration to keep record biker's riding stats
6. Illuminous Indication and Warnings using RGB LED effects

This project contributes to the **wellbeing** and **safety** of the **society** targeting the United Nations **SDG-3** & **SDG-9**

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## Development Platforms & Technologies:

