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| **MAJOR PROJECT** | |
| Domain of the Project | Machine Learning and IOT |
| Title of the Project | Rider Helmet Detection for Fuel Filling. |
| Year/Sem | 4th Year /1st Sem |
| Name of the Guide&  Designation | B. Gayathri (Assistant Professor) |
| Date of Submission | 26/09/2022 |
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**ABSTRACT**

Motorcycle accidents have been rapidly growing through the years in many countries. In India more than 37 million people use two wheelers. Therefore, it is necessary to develop a system for automatic detection of helmet wearing for road safety. Therefore, a custom object detection model is created using a Machine learning based algorithm and IOT which can detect motorcycle riders with helmet and also without helmet. By this system it detects the rider and if the rider with helmet, then it opens the gate and allows the biker for fuel filling. By this system we can avoid the motorcycle accidents and if we keep helmet as a mandatory for rider while filling fuel at petroleum bunks every biker will maintain and wearied with helmet using this caution, we can save the lives and they start following the traffic rules and road safety rules. This Application can be implemented in real-time using a Webcam or a CCTV as input.

**Guide Signature Project coordinator HOD-CSE**