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EV Based BMS with Charge Monitoring, Fire Protection and Accident Detection

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Abstract: *Electric Vehicle (EV) Battery Management System (BMS) plays a critical role in ensuring safe and efficient vehicle operation. This project focuses on developing an advanced BMS that integrates real-time charge monitoring, fire protection, and accident detection features. The system continuously measures battery voltage, current, temperature, to maintain optimal performance and extend battery life. A smart thermal protection unit detects overheating and fireprevention actions. Additionally, an accident detection module uses sensors to sense sudden impacts . The proposed system enhances safety, reliability, and overall vehicle protection by combining monitoring, fault detection, and emergency response through this project.*

Keywords: Battery Management System, Charge Monitoring, Fire Protection, Accident Detection, Electric Vehicle Safety

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