

**BATTERY MANAGEMENT SYSTEM
OF AN
ELECTRIC VEHICLE**
Final year project report submitted in partial fulfilment of the requirements
For the award of the degree of
BACHELOR OF TECHNOLOGY
IN
ELECTRICAL & ELECTRONICS ENGINEERING

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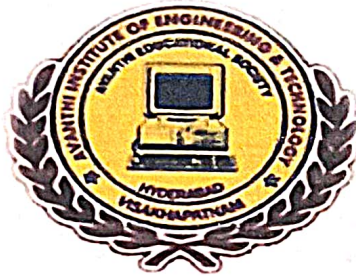
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CERTIFICATE

This is to certify that the project report entitled " **BATTERY MANAGEMENT SYSTEM OF AN ELECTRIC VEHICLE** " is a bona fide work submitted by **CH. TARUN KUMAR N. AJITH KUMAR, P. SIVA LEELA PRASAD, Y. TARUN KUMAR, CH. VENKATESH** in partial fulfillment of the requirements for the award of degree of

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ABSTRACT

With the increasing demand for electric vehicles (EVs) and renewable energy systems, battery management systems (BMS) have become crucial for the efficient and safe operation of batteries. This abstract provides an overview of the techniques employed in the development and evaluation of battery management systems. BMS is important for the battery performance and long Gevity, it controls the power from and to the battery and it monitors the state-of-charge (SOC), state-of-health (SOH), and it ensures safety of the user by charging and discharging of the battery properly and safely. BMS also includes thermal management which governs the operating temperatures of the battery and makes sure that the temperature of the battery does not exceed the limits, it also manages cell balancing which balances the individual cell voltage of the battery pack, it estimates the battery life and the charge left in the battery accurately.