



BATTERY HEALTH MONITORING USING IOT
A PROJECT REPORT

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In partial fulfillment for the award of degree

Of

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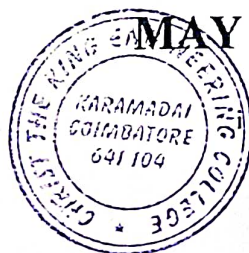
in

ELECTRICAL AND ELECTRONICS ENGINEERING

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BONAFIDE CERTIFICATE

Certified that this project report "BATTERY HEALTH MONITORING USING IOT" is the bonafide work of "DIVYA .B (710419105012), who carried out the project work under my supervision

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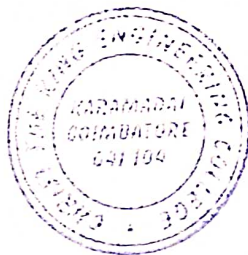
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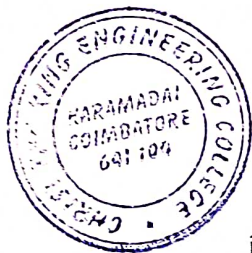
EXTERNAL EXAMINAR



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ABSTRACT

- For safe and reliable operation of batteries on electric vehicles, the online monitoring and states estimation of the batteries is necessary. To make it convenient for every vehicle owner to monitor the battery status of their vehicles anytime and anywhere. Renewable energy sources (res) can be regarded as the key input for development because of its' unique properties such as cleanliness, noiselessness, ecofriendly nature, etc. In this project, real-time monitoring of the batteries based on the internet of thingshere we are using both renewable and non-renewable energy for batteries based on availability. Our proposed system monitors the various parameters and provides an indication about etc. In that we use iot technology for communicating information and by using a buzzer alarm for indicating the abnormal condition of the battery.



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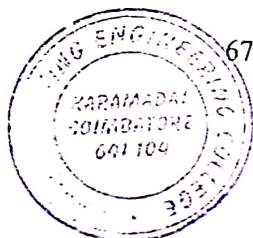

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CHAPTER 5

5.1 CONCLUSION & FEATURE SCOPE

A system to estimate the BMS-derived SoH influence of charging parameters such as the charged energy and ambient temperature as well as a generation of charging recommendations is proposed. The resulting recommendation is used to guide an EVO's vehicle usage in order to prolong the EV battery lifetime, looking at the battery as a black-box system. Therefore, an analysis of an EV's historical performance data is used to formulate EV battery usage (driving and charging) recommendations. Especially the request for fast charging the EVs under any environmental condition was an important focus on the design of the first recommendation.

Nowadays, vehicle electric systems are driven by fuel economy, ecology, and by new functions for improvement of safety, comfort, and reliability. Electrically driven components that require electrical power of high reliability are penetrating the mass market, and the emerging start-stop systems will bring new challenges. Overall the requisite electrical performance is increasing with much higher fluctuations of the load demand. This cannot be accommodated simply by scaling up today's components.



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