Project Title: Liion Mark 2 – Custom-Built Electric Bike

Team Name: Team Liion

Event: National-Level Project Competition

Venue: Sri Ramakrishna Institute of Technology (SRIT), Coimbatore

Award: Best Self Manufactured Design

Introduction

Team Liion participated in a National-level Engineering Project competition held at Sri Ramakrishna Institute of Technology (SRIT), Coimbatore, with our project titled Liion Mark 2 – a fully custom-built electric bike. The event attracted innovative projects from across India and provided a platform to showcase technical skills, teamwork, and product development.

Project Summary

Liion Mark 2 was developed entirely from scratch by our team, focusing on in-house design and manufacturing. The project included the development of the following.

- A functional drivetrain system.

- A digital instrument cluster with real-time display (speed, battery percentage, temperature) using Raspberry Pi.

- A custom-fabricated chassis and integrated electrical system.

Our objective was to demonstrate the feasibility of a cost-effective, functional, and technically sound electric vehicle with minimal outsourcing.

Team Contribution

Each team member played a vital role in the project's success, contributing across various domains such as electrical system design, embedded programming, mechanical fabrication, PCB design, testing, and system integration. The collaborative spirit and shared technical knowledge were key to overcoming the challenges of building an EV bike from the ground up.

Event Experience

At SRIT, the competition featured participation from multiple institutions showcasing innovations in EVs, robotics, IoT, and more. Our team presented the Liion Mark 2 to a panel of judges comprising of industry experts and faculty evaluators. The demonstration included both static presentation and live performance of the bike.

Achievement

We were honored with the Best Self-Manufactured Design Award, recognizing our commitment to end-to-end development, practical innovation, and technical excellence. The award is a testament to our hands-on Engineering approach and strong team collaboration.

Conclusion

The competition at SRIT served as a valuable platform for applying classroom knowledge in a real-world context. Team Liion is proud of this achievement and looks forward to taking the Liion Mark 2 project further with enhancements in performance, design, and usability in future versions.