Sarvasiddi Nagabhushanam

Anakapalle, Andhra Pradesh | 9392830247 |
Nagsarvasiddi630@gmail.com
https://www.linkedin.com/in/nagsarvasiddi

ABOUT

Experienced Electrical System Engineer at Xstrad Corp with a strong background in EV software and hardware. Demonstrated expertise in designing vehicle architecture, fault debugging, and system integration to ensure reliable performance. Proficient in utilizing MATLAB and Simulink for EV modeling and optimization. Skilled in powertrain sizing and collaborating with cross-functional teams to ensure seamless component placement and maximize system efficiency

PROFESSIONAL EXPERIENCE

Xstrad Corp | Electrical System Engineer | Aug 2024 - Current

- Design and develop EV architecture for Two-wheelers, including powertrain sizing and wiring harness layout
- Simulate powertrain components in MATLAB for performance validation
- Conduct fault analysis via CAN Protocol and resolve system issues
- Collaborate with mechanical teams for optimal placement of electrical components in the chassis

ISIEINDIA Private Limited | MATLAB Developer Internship | 8 Months

- Developed and simulated EV component models in MATLAB and Simulink to assess system performance
- Conducted powertrain sizing for key EV components, ensuring optimal selection for performance goals
- Coordinated with vendors for EV component procurement, streamlining supply processes for project needs

PROJECTS

Design and Fabrication of High Speed Electric Two-Wheeler

- Conducted end-to-end design and fabrication of an electric two-wheeler, focusing on structural integrity, battery placement, and component layout.
- Engineered and assembled electrical systems, including battery management, motor, and controller integration.
- Optimized powertrain configuration for improved energy efficiency.
- Employed testing methods to ensure safety and reliable functionality under varied operational conditions.
- Designing the Vehicle Architecture and Low Voltage wiring and High Voltage Wiring.
- Conduct fault analysis via CAN Protocol and resolve system issues

Simulation and Optimization of Electric Vehicle Powertrain in MATLAB/Simulink:

- Developed a detailed powertrain model using MATLAB/Simulink to simulate and optimize EV performance.
- Utilized simulations to analyze motor torque, battery state of charge, and energy consumption.
- Implemented control strategies to balance power demand, enhancing efficiency and regenerative braking.

SKILLS

- MATLAB & Simulink
- Vehicle Architecture and Integration
- Power Electronics Design
- Wiring Harness for 2 wheeler
- BMS Hardware development
- Battery Pack Design

EDUCATION

- **Bachelor of Technology** - Electrical and Electronics Engineering | Vishnu Institute of Technology | 2021-2024 | CGPA: 8.7/10
- **Diploma** - Electrical and Electronics Engineering | Rajiv Gandhi Recs Polytechnic | 2018-2021 | 87.8%
- **SSC** | Prasanthi Niketan School | 2017-2018 | 85%

ACHIEVEMENTS

- IITH has approved funding for our project
- SAE India Best Innovation Award in 2023
- National Science Olympiad 2nd place in 2017

CERTIFICATIONS

- Build An Electric Vehicle certification from Udemy
- MATLAB, Simulink, and Stateflow from MathWorks
- Introduction to Motor Control System from MathWorks
