LOGESH S

18/05/2004

About Me

- Enthusiastic Electrical and Electronics Engineering student with a strong interest in electric vehicle (EV) motor control and battery management systems (BMS).
- Possessing foundational knowledge of motor control principles, I am seeking an internship to apply and expand my skills in designing and implementing control algorithms for EV powertrains, contributing to sustainable transportation advancements.

8668197504

logeshshang@gmail.com

Karur, TamilNadu-639008.

EDUCATION

Bachelor of Electrical and Electronics Engineering at V.S.B. Engineering College | 2022–2026.

Cheran Matriculation Higher Secondary School | Completed in 2022

RESEARCH AND DEVELOPMENT INITIATIVES

- Explored the replacement of Switched Reluctance Motors (SRM) with BLDC motors, along with battery charging using photovoltaic cells during stable and running conditions.
- Proposed the implementation of SRMs in compressors and discussed the feasibility with expert jury members and industry professionals.

GITHUB

Github name - codidiot-user
Link: https://github.com/codidiot-user

CERTIFICATIONS

Hindi Language:

- Pariskha: Passed with Distinction
- Prathamic: Passed with First Class
- Madhyama: Passed with First Class (Papers 1 & 2)
- Rashtrabhasha: Passed with Second Class (Papers 1 & 2)

Others:

- Python Programming Certification
- Mind Mapping Techniques
- Java Completion Certification

SKILLS

- **Programming Language**:
- Python (BeautifulSoup4, Requests, Streamlit),
- Arduino language.
- **Hardware**:
- Microcontrollers (Arduino)
- Sensors (Vibration, IR, Ultrasonic, PIR)

ACHIEVEMENTS

- Shortlisted as one of 13 teams (out of 250 initial applicants) in the MSME IDEA HACKATHON for 2024 for a project on “PV-based Electric Vehicle using Sensor-less SR Motor”.
- Secured 11th position out of 40 teams in Anvenshana National level Engineering Project Expo 2023 for a project on “ATOM” which aimed to perform multi-functions in a single Robot .
- Developed a web application using Python and Streamlit.

LANGUAGE

- Tamil (Native)
- English (Fluent)

HARDWARE PROJECTS

- Scrolling LED:

Project Overview: Designed and implemented a scrolling LED text display.

Technologies Used: Arduino/Microcontroller, LEDs, Shift Registers, C/C++

Key Contributions:

Digital I/O Control: Proficiently managed digital input/output to control individual LEDs and create patterns.

- Multi-function Robots:

Project Overview: Built and programmed a robot that could move on its own or be controlled remotely.

Technologies Used: Arduino, DC Motors, Motor Drivers, Infrared (IR) Sensors, Ultrasonic Sensors, Bluetooth, C/C++.

Key Contributions:

Autonomous & Remote Control: Programmed the robot to follow lines, detect edges, avoid obstacles, follow humans, and perform motion-based rotation as an autonomous rover, also enabling remote control via wireless communication.

- Battery Switching in EV:

Project Overview: Developed a prototype on automatic dual battery switching system in electric vehicles (EVs), enabling uninterrupted power supply and optimized battery usage.

Technologies Used: Microcontroller, Relay Module, Voltage Monitoring Circuit, Embedded C/C++

Key Contributions:

- Battery Management Logic: Designed and implemented logic to automatically switch between two batteries based on voltage levels.
- Prototype Implementation: Built and tested the circuit using relays (upgraded later to MOSFETs for better efficiency and compact design), and demonstrated successful switching during runtime.
- Efficiency Improvement: Reduced manual intervention and optimized battery usage, enhancing EV operational reliability.

Link:
https://drive.google.com/drive/u/0/folders/1xFWyU-9-Gnlm2GXCuicg27Z45f1-NwPJ

SOFTWARE PROJECTS

- **Project: QuantWeb.Ai**

Description: Designedan AI chatbot model using Python and Streamlit achieving up to a 17% increase in model processing speed.

Link: https://codidiot-quantweb-ai.streamlit.app/

- **Project: QuantWeb Background Remover.**

Description: Designed using only Python and Streamlit achieving 99% background removal accuracy on images.

Link: https://remover-codidiot-user.streamlit.app/

AREA OF INTEREST

- Switched Reluctance Motor
- AIML