Harshini M

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📍 Namakkal, Tamilnadu

📅 2004/03/29

Profile

Electronics and Tech Enthusiast

A highly motivated and creative engineering graduate with a strong passion for innovation and problem-solving. Interested in exploring real world opportunities on electronics sector. Considered to be Hard-working, good communication skills and good team management skills and good circuit solving and programming skills. Eager to contribute to cutting-edge projects and collaborate with cross-functional teams to deliver world-class technology solutions.

Education

2021/08 – present Coimbatore	**Bachelor of technology [Electronics and Communication Engineering]** *Amrita Vishwa Vidyapeetham* **Current CGPA of 8.9**
2019/06 – 2021/07 Namakkal	**High School Diploma** *Trinity International School* **Scored 94.2% in Intermediate education**

Professional Experience

Summer internship at Amrita Racing team [SAE]
Electrical lead

- Worked with a cross functional team of 25 members from various department in the development of first ever formula standard electric car from our college.
- Engineered and simulated essential electrical circuits for the safe and efficient operation of electric vehicles. This includes circuits for the Accelerator Pedal Position Sensor **(APPS)**, Ready to Drive Sound **(RTDS)**, Traction System Active Light **(TSAL)**. These circuits ensure precise vehicle control, prevent accidental startup movements, indicate system readiness, and protect high-voltage components and also good knowledge on battery calculation and connection .
- Made PCB designs using Altium software and also assisted in inventory management and purchasing and also Integrated a range of sensors with microcontroller, gaining experience in sensor interfacing and data acquisition.

Projects

Square root analog calculator using op-amps.
Performed Square root operation with low error(0% to 2%) under a specific range of input voltages using with the help of LTspice and Proteus software.

Integration of FPGA and Bluetooth module.
The project aims to establish communication between two Field-Programmable Gate Arrays (FPGAs) using Bluetooth modules for transmitting arithmetic operation results ang implemented using Basys 3 , Vivado , HC 05 Bluetooth module and tera term.

Alcohol based ignition system using ARM LPC2148
ARM based vehicle ignition control system that disables the ignition system using LPC2148 microcontroller when the driver is drunk and the location of the car is immediately tracked using GPS module.

Brain Tumor Detection
Detection of brain tumor using image processing and Random forest classifier from the MRI scans and acheived a result of 84% accuracy with the usage of GLCM feature extraction.

Acheivements

Participated in SAE SUPRA 2024
Won first prize in the Static events in the EV category and overall second position in the EV category

Secretary of Amrita Racing team SAE
Managed team activities and conducted and organised team meetings to enhance team progress.

Anokha 2024 Technical Event - Event Head (ECE)
Planned and organised intersting and mind bending activities and tech events with exciting cash prizes.

LV Electrical Lead of SAE team
Guiding the electrical members to learn new skills and sharing knowledge with each others to aid team work.

Skills

PCB designing	MATLAB
python and C language	Verilog
Testing and prototyping.	Altium Software

Interests

- Analog electronics
- VLSI System design
- Embedded systems