

# VAISHAKH V

## EMBEDDED SYSTEM ENGINEER

Embedded Systems Engineer with a background in Electrical and Electronics Engineering. Skilled in creating and improving embedded solutions. Strong problem-solving abilities and knowledge of modern technologies. Currently pursuing MTech in Embedded Systems to deepen expertise and contribute to innovative and efficient projects.

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### CONTACT

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### SOFTWARE

Vivado  
Linux  
Keil ARM Cortex  
Machine Learning  
Real Time OS  
KiCad  
Etap  
Auto Desk Fusion

### SKILLS

Research & Problem-Solving  
Project Coordination  
Debugging skills

### PROGRAMMING LANGUAGES

VHDL  
Embedded C  
Python  
Assembly

### LANGUAGES

English  
Malayalam  
Hindi  
Tamil

### EXPERIENCE

**PCB DESIGNER - SIGN EMINENT ENTERPRISES PVT LTD** 2023 - 2024  
Freelanced as a PCB designer for Sign Eminent Enterprises Pvt Ltd, developing Battery Management System (BMS) PCBs for inverters and power management applications using KiCad. Responsibilities included schematic design, circuit optimization, layout implementation, and design validation to ensure efficiency, reliability, and compliance with industry standards.

**TEAM LEAD FOR NANOSAT DEV PROJECT – GAGAN AEROSPACE** 2020 - 2023  
Led a multidisciplinary team in developing a nano-satellite, managing component selection, circuit design, and subsystem simulation. Oversaw project timelines, facilitated cross-functional collaboration, and ensured efficient team coordination to meet key milestones. Conducted rigorous testing and validation to enhance system performance and reliability. Contributed to the project during my college years as part of Gagan Aerospace, a startup incubated under NSSCE.

### EDUCATION

**MASTER OF TECHNOLOGY (M.TECH)** 2024 - 2026  
Embedded Systems (Ongoing)  
Vellore Institute of Technology (VIT)  
CGPA: 8.17

**BACHELOR OF TECHNOLOGY** 2019 - 2023  
Electrical and Electronics Engineering  
NSS College of Engineering Palakkad Kerala  
CGPA: 7.91 (First Class)

**HIGHER SECONDARY SCHOOL** 2016 - 2018  
Computer Science  
MNKM HSS Chittilamcherry Kerala  
Percentage aggregate: 87.75%

### ACTIVITIES

**SOLAR STORM PREDICTION USING CUBESAT DATA:** Developed an ML model to detect and predict solar storms using CubeSat telemetry.

**MACHINE LEARNING & AI PROJECTS:** Built binary image classifier, hand recognition and tracking system for IoT home automation, line follower.

**SPACE CLUB LEAD, CELESTIA NSSCE:** Organized workshops and collaborated with ISRO veterans to enhance industry engagement and technical learning.

**IOT & MICROCONTROLLER PROJECTS:** Designed and implemented multiple IoT and embedded system-based DIY projects.