# VAISHAKH V

# EMBEDDED SYSTEM ENGINEER

Electronics and Embedded systems engineer with a strong foundation in electrical engineering. Passionate about hardware-software integration, IoT, PCB design, and space technology, with a commitment to continuous learning and innovation.

#### **CONTACT**

+91 9497334997 itsvaishakh@gmail.com linkedin.com/in/vaishak-v github.com/vaishakh-v

#### **SOFTWARE**

MATLAB KiCad LTspice Etap Wireless Networking Vivado Linux Keil ARM Cortex Auto Desk Fusion

## **SKILLS**

Research & Problem-Solving Project Coordination

# PROGRAMMING LANGUAGES

Python (Machine Learning) Embedded C VHDL Assembly

#### LANGUAGES

English Malayalam Hindi

#### **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**

#### MTech in embedded systems

Vellore Institute of Technology (VIT)

CGPA: 8.17

#### BTech in electrical and electronics engineering

NSS College of Engineering Palakkad Kerala

CGPA: 7.91

## Higher secondary school in computer science

MNKM HSS Chittilamcherry Kerala

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.