# 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.

# **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

#### **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 2020 - 2023 AEROSPACE

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

2016 - 2018

Electrical and Electronics Engineering NSS College of Engineering Palakkad Kerala CGPA: 7.91 (First Class)

#### HIGHER SECONDARY SCHOOL

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.