

# **LAVITRA SAHU**

# **INTERNET OF THINGS ENGINEER**

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### **PROFILE SUMMARY**

- Embedded Systems and Avionics Engineer experienced in designing realtime flight computers, PCB systems, and IoT architectures.
- Built 25+ engineering-grade projects and delivered workshops to 1000+ students.
- Contributed to systems tested in Teknofest and IN-SPACe competitions.

# **TECHNICAL SKILLS**

- Microcontrollers: ESP32, Pico, Arduino Nano BLE
- SBC: Raspberry Pi, Jetson Nano
- Sensors & IMU Fusion (BNO085, BMP390)
- PCB Design: EasyEDA, DRC, noise optimisation
- · Telemetry & Avionics systems
- Python, C/C++
- Real-time debugging & testing
- · CAD, 3D Printing & Enclosure Design

# **EDUCATION**

B.Tech - Computer Science (IoT), PSIT Kanpur — 2021–2025

Senior Secondary — Laughing Buddha Academy (2021)

High School — Delhi Public School, Kalyanpur (2019)

### **PROJECT HIGHLIGHTS**

#### Avionics - Teknofest

Designed flight computer integrating IMU, barometer, pyro control, and telemetry for competition-level missions.

#### **IN-SPACe Dual-MCU Avionics Board**

Built a reliable dual-MCU PCB for event sequencing, redundancy, and flight data logging.

#### **Quadruped Robot (Vaman)**

Worked on IMU-based gait stabilization and LiDAR mapping for locomotion and obstacle avoidance.

## **ACHIEVEMENTS**

- 2nd Prize IN-SPACe ISRO Rocket Competition (2025)
- Best CanSat Design Award IN-SPACe (2025)
- Completed Teknofest technical review stages (2024)
- · Conducted 10+ workshops; trained 1000+ students

### **TOOLS & TECHNOLOGIES**

YOLOv5/8, OpenCV, EasyOCR, Jetson Nano, Docker, Git, Fusion360

# **STRENGTHS**

- · Hands-on engineering
- · Hardware-software integration
- Debugging under pressure
- Clear documentation
- Teaching & mentorship

