Mandaji SaiKumar

Sensor Hardware Engineer | Expert in Technical Collaboration and PCB Design | Skilled in System Testing and Compliance

Hyderabad
+91 7095797212
mandajisaikumar@gmail.com

Skills

Programming:
C, C++, Python,MicroPython,HTML CSS and JavaScript.

Embedded Systems & IoT Protocols:
UART,CAN,SPI, I2C, Xbee, LoRa, Bluetooth, Wi-Fi, MQTT and HTTP.

PCB Design:
KiCad, Altium, Orcad, and EasyEDA Pro.

Hardware Tools:
oscilloscopes, multimeters, and signal generators.

Simulation tools:
LTspice, EasyEDA and PuTTY

Languages

English **Telugu** **Hindi**

Profiles

mandaji-saikumar

Portfolio

Summary

I'm an engineer who's really good at designing circuit boards and leading teams. I'm great at understanding what customers want, making sure projects follow the rules, and fixing any problems that come up. I specialize in working with tiny computer systems, connecting different devices, using sensors and actuators, and making sure everything can communicate with each other. I've led a bunch of successful projects and helped teach others along the way.

Experience

Niltech pvt.ltd **2020 - Present**
IOT DEVELOPER

- Facilitated technical collaboration among cross-functional teams and clients to refine hardware system designs and firmware for IoT applications.
- Utilized various microcontrollers and IoT modules to develop cutting-edge products, enhancing system reliability through PCB designs.
- Led design reviews, devised system test plans, and ensured regulatory compliance using simulation tools and lab equipment.
- Successfully completed multiple projects, guiding cross-functional teams in product development while mentoring over 200 interns to replicate finalized products.
- Developed Python scripts for simulating and analyzing methods to optimize product outcomes.

Education

Guru Nanak college of engineering **2016-2019**
ELECTRONICS AND COMMUNICATION ENGINEERING B.Tech

Jyothishmathi Institute Of Technology **2013-2016**
ELECTRONICS AND COMMUNICATION ENGINEERING Diploma

Projects

BeetleGuard
BeetleGuard integrates IoT and LoRa technologies to monitor and optimize beetle grove environments. It focuses on tracking temperature and humidity levels to control the beetle door intelligently.

1. Successfully integrated IoT & LoRa technologies, enabling real-time monitoring of beetle grove conditions.
2. Developed a network of over 100 slave devices within a 2 km radius, ensuring comprehensive data collection.
3. Engineered a system with a remarkable 50-day battery life per slave device, minimizing maintenance requirements.
4. Spearheaded the development of a streamlined data visualization platform for efficient data analysis.