NIHAL NAVAS

+91 91234 567XX | nihal.navas.demo@gmail.com | **LinkedIn** | **GitHub** | **Bangalore**

SUMMARY

Embedded Systems Engineer fresher with hands-on experience in Embedded C, UART, I²C, SPI, FreeRTOS and IoT protocols including MQTT and Node-RED. Skilled in driver development, sensor interfacing and real-time debugging on LPC1768 and STM32 platforms. Actively seeking entry-level Embedded / Firmware Engineer role.

SKILLS

Programming : C • Embedded C • Python

Microcontrollers : LPC1768 • STM32 • Arduino

IoT : MQTT | ThingSpeak • Node-RED

RTOS / OS : FreeRTOS • Embedded Linux Fundamentals

Communication Protocols : UART • SPI • I²C • CAN

Tools : Keil • Arduin • IDE VS Code • Proteus

Version Control : Git • GitHub

Operating Systems: Linux • Windows

Soft Skills: Problem Solving • Debugging • Team Collaboration • Technical Documentation

PROJECT EXPERIENCE

UART & I²C Driver Development – LPC1768   [Project Link]
- *Developed UART and I²C drivers using Embedded C on LPC1768 microcontroller.*
- *Interfaced temperature sensor and displayed real-time data on serial terminal.*
- *Performed debugging and validation of serial protocols.*
  Tools & Technologies: *LPC1768, Embedded C, UART, I²C, Interrupts, Keil uVision, Proteus, Logic Analyzer*
  Training Institute: **IIES Bangalore**

IoT Smart Monitoring System   [Project Link]
- *Collected real-time sensor data using Arduino and transmitted it to an MQTT broker.*
- *Visualized live sensor readings on a Node-RED dashboard.*
- *Implemented reliable data transmission and basic error handling*
  Tools & Technologies: *Arduino, Embedded C, MQTT, Node-RED, ThingSpeak, IoT Sensors, Wi-Fi Module*
  Training Institute: **IIES Bangalore**

EDUCATION

B.E – ECE	Vinayaka Mission Research Foundation	**2024**

TRAINING/CERTIFICATIONS

Embedded Systems	**IIES Bangalore**	**2025**