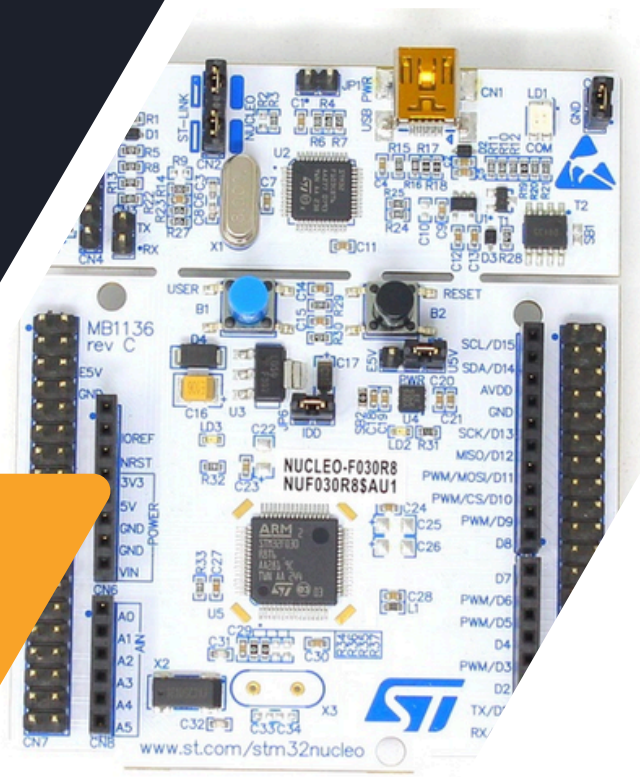
Make IoT
Empoworing The Future

Embedded Systems Design Internship

Become JOB Ready



Online and Offline Mode

Embedded Systems Challenge !

A 4-week hands-on internship designed to make you skilled in embedded systems using the STM32 microcontroller. Learn by doing, from GPIO and timers to communication protocols and build a real project that You can proudly showcase.

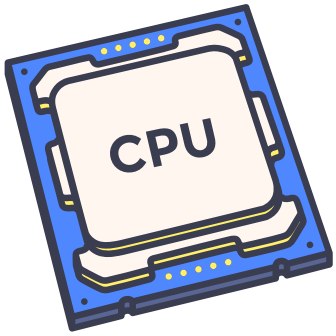
What You'll Achieve in Internship

- **Embedded C Programming**
- **STM32 Microcontroller**
- **GPIO, Timer, ADC, PWM**
- **UART, I2C, SPI, CAN**
- **Tools like QUEM, Proteus**
- **Building Real Projects**
- **Register level to HAL API**

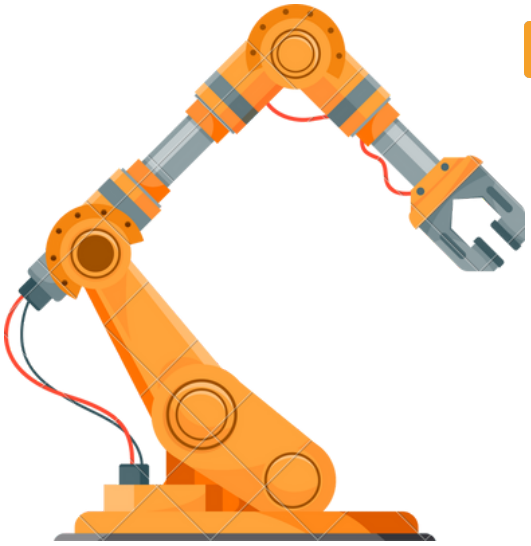
1st Week

Embedded System Fundamentals

- ✅ Introduction to Embedded Systems
- ✅ ARM Cortex-M4 core basics.
- ✅ ISA CISC vs RISC
- ✅ ARM Cortex-A, R, M
- ✅ STM32F4 Architecture
- ✅ STM32F4-Discovery Board
- ✅ STM32Cube IDE setup
- ✅ QEUM Emulator
- ✅ Special Function Registers
- ✅ Programmer Model
- ✅ Memory Model



2nd Week



Controller Basics

- ✅ Clock
- ✅ GPIO
- ✅ Register-level programming
- ✅ LED blinking
- ✅ BIT Testing, Setting, Clearing
- ✅ Bit Right and Left Shifting
- ✅ STM32Cube Package
- ✅ Hardware Abstraction Layer

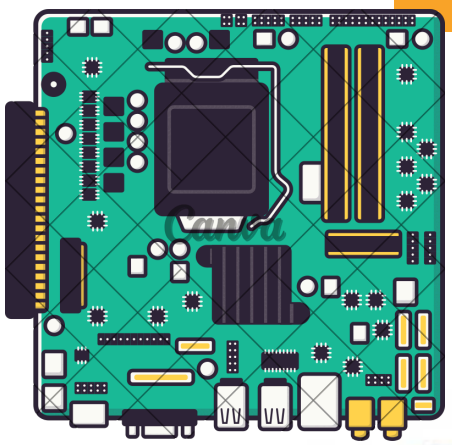
- Mock Interview for Embedded Software Engineer Roles
- Embedded C and Python Coding Challenges & Debugging Exercises

FREE

3rd Week

Mastering Microcontrollers

- ✅ Timer
- ✅ PWM
- ✅ Interrupts & ISR
- ✅ ADC and DAC
- ✅ 7 Segment Display
- ✅ 16x2 LCD interfacing
- ✅ Motor interfacing
- ✅ Potentiometer and
- ✅ Analog Sensor



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4th Week

Communication Protocols

- ✅ UART
- ✅ I2C
- ✅ SPI
- ✅ CAN
- ✅ WiFi (802.11)
- ✅ BLE

- Hands-on Labs & Real Time Projects
- Exclusive PDFs & Cheat Sheets
- Access to STM32Cube Projects & Source Codes

FREE

This internship is your chance to work on real world projects👨‍💻, gain industry-level skills💡, and stand out from the crowd.🎯

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