

# Ho Duc Nam

Embedded Software



Hanoi, Vietnam

## OBJECTIVE

- Short-term goal: Apply programming knowledge and skills learned at school to a real working environment. Develop teamwork skills and learn from experts to become a professional programmer within the next 1-2 years.
- Long-term goal: Strive to become an expert in embedded software, capable of building and managing large projects within the next 5 years. Contribute to the development of the company as well as create many useful products for the community.

## EDUCATION

10/2020 - 8/2024

HANOI UNIVERSITY OF SCIENCE AND TECHNOLOGY

Electronics and telecommunication

CPA: 3.0 / 4.0

2/2021 - 6/2021

ECORP INTERNATIONAL EDUCATION SYSTEM

English course level 1

Meet output qualifications

## WORK EXPERIENCE

AIoT System Joint Stock  
Company

2/2024 - 4/2024

### EMBEDDED C INTERN

- Trained in C programming skills, programming for STM32 microcontrollers. Write reports and practice assigned exercises.
- Learn about the company's projects, learn about programming modules in the company's projects.

Lumi Joint Stock Company,  
Hanoi

8/2023 - 9/2023

### EMBEDDED C INTERN

- Do a small project with my team (build LCD communication library). Use the company's toolkit to program on STM32CubeIDE software, using C language.
- Get trained in programming skills, communication protocol standards and practice assigned exercises.

## PROJECTS

Air quality monitoring system

4/2024 - 7/2024

### YOUR POSITION IN PROJECT: DEVICE PROGRAMMING, WEB PROGRAMMING, CIRCUIT ANALYSIS

The project uses specialized sensors to measure CO, CO2, NO2, fine dust particles and

Name of customer:

Ho Duc Nam  
Your Team Size: 3

Building an LCD screen  
communication library

8/2023 - 9/2023

Name of customer:  
Ho Duc Nam

Your Team Size: 2

Website for hospital  
appointment booking

3/2023 - 6/2023

Name of customer:  
Ho Duc Nam

Your Team Size: 2

temperature & humidity. These metrics are sent to the processing and storage center via MQTT, with a Wi-Fi connection, and finally displayed on the web/app for users to access. Users accessing the web/app will be able to know the exact detailed air indexes.

**TECHNOLOGY DESCRIPTION**

Embedded : STM32CubeIDE, Visual Studio Code.  
Design Hardware : Altium.  
Web: Visual Studio Code (Javascript)

**YOUR POSITION IN PROJECT: DEVICE PROGRAMMING**

Use STM32 (NUCLEO-F401RE) and the company's expansion kit to program and create a library including (Change pre-installed fonts, can change 30 different fonts, draw arbitrary images on the LCD screen).

**TECHNOLOGY DESCRIPTION**

STM32CubeIDE

**WEB PROGRAMMING: FRONTEND PROGRAMMING**

Programming using react, creating a basic hospital website with remote medical appointment scheduling function.

**TECHNOLOGY DESCRIPTION**

Visual Studio Code (React)

ACTIVITIES

4/2024 - 7/2024

**IOT CHALLENGE 2024**

Embedded Software

Participated in developing the project "Air Quality Monitoring System" with my team. The competition was organized by FPT, sponsored by SiliconLab, and accompanied by major universities of technology in Hanoi.

9/2024 - Hiện tại

**FPT ACADEMY (FPT SOFTWARE)**

Embedded Software

Join the training course at FPT Software, training for 4 months and studying in the evening. Trained in-depth knowledge of C programming and Embedded programming

CERTIFICATIONS

7/2024

**Top 20 Best Team Members  
in the "IoT Challenge 2024"**

7/2024

**Participating in the final  
round of the "IoT Challenge  
2024"**

SKILLS

**Specialized skills**

- Programming & Tools: C, Github.
- Microcontroller Programming: STM32, ESP32, AT89C52.
- Driver Development: GPIO, UART, MQTT, ADC.
- IDE: Visual Studio Code, STMCubeIDE, KeiIC, ArduinoIDE.
- PCB Design: Altium, Proteus.

**Soft skills**

- Communicate.
- Logical Thinking and Problem-Solving.
- Team Collaboration.