



PHAN THANH HUY

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👥 Co-Founder FTES

EDUCATION

•Ho Chi Minh City University of Technology (HCMUT)

Bachelor of Engineering in Computer Engineering

GPA: **3.1/4.0**

08/2022 – 06/2026

Ho Chi Minh City, Vietnam

OVERVIEW

- Strong in **C/C++**, OOP, Data Structures & Algorithms, and problem-solving.
- Solid knowledge of **Embedded C**, including pointers, memory, bitwise operations, volatile, and interrupts.
- Hands-on experience with **STM32**, **ESP32**, **Arduino**, **Micro:bit**, **FPGA**, GPIO, ADC, PWM, timers, and **UART/SPI/I2C**.
- Co-Founder & Technical Leader of **FTES**; 2+ years mentoring C/C++ and competitive programming.

PROJECTS

•FPGA-Based SoC for ECG Signal Classification | GitHub

11/2025 – 05/2026

Graduation Thesis – Grade: A

- Designed an FPGA-based **System-on-Chip (SoC)** for real-time ECG signal preprocessing and classification.
- Implemented ECG acquisition, filtering, feature extraction, and hardware-accelerated classification modules on **Kria KV260 Vision AI Starter Kit**.
- **Key Contributions:** 1D-CNN Training & Evaluation, Embedded C/C++, FPGA Driver Development, MMIO/DMA, Hardware-Software Integration.

•ESP32-Based IoT Monitoring & Control System | GitHub

08/2025 – 10/2025

Personal Embedded Project – Grade: A+

- Developed an **ESP32-based IoT system** for environmental monitoring and remote device control.
- **Technical Skills:** C/C++, ESP32, FreeRTOS, DHT20, I2C, PWM, WiFi, RESTful API, Firebase, PlatformIO.

•AI-Integrated Plant Health Monitoring System | GitHub

04/2025 – 06/2025

Personal Embedded Project – Grade: A+

- Developed an **STM32-ESP32 smart plant monitoring system** combining real-time sensor acquisition with **AI-based plant health classification**.
- **Tech:** Embedded C, STM32F103, ESP32, UART, I2C, DHT20, LCD, AI

TECHNICAL SKILLS

Programming Languages: C/C++, Python (Basic)

Core Knowledge: Data Structures & Algorithms, Object-Oriented Programming (OOP), Digital Logic Design, Computer Architecture, Computer Organization, Operating Systems

Embedded Systems: STM32, ESP32, Arduino, Micro:bit

Communication Protocols: UART, SPI, I2C

Hardware Interfaces: Sensors, Relays, GPIO, ADC, PWM, Timers

Development Tools: STM32CubeIDE, Visual Studio Code, Git, GitHub

Soft Skills: Technical Leadership, Problem Solving, Analytical Thinking, Teamwork, Communication, Mentoring

Areas of Interest: Embedded Software, Firmware Development, Microcontrollers

AWARDS

[DETAILS]

•AIoT Developer InnoWorks 2022 Fourth Prize – Sysma Team

Dec 2022 – Jun 2023

•Startup SIU 2023 First Prize – Sysma Team

Apr 2023

•National Science and Technology Competition Fourth Prize

Jan 2024

•CSE MINATHON 2024 Most Voted Team Award

Jan 2024

•Outstanding Student Award Faculty of Computer Science and Engineering, HCMUT

Jun 2024