

# EMBEDDED SOFTWARE INTERN

## Voong Tieu Phuong

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### Career Objective

Final-year student majoring in Electronics and Telecommunications Engineering with a strong foundation in embedded programming, microcontrollers, and system design. Seeking an internship to apply knowledge in IoT and automation systems, enhance industrial experience, and contribute to practical projects through strong logical thinking and system development skills

### Education

**Ho Chi Minh University of Technology**

October 2020 - Now

Major: Electronics and Telecommunications Engineering

### Skills

- **Programming Languages:** C, C++
- **Microcontrollers:** STM32, AVR, ESP32
- **Communication Protocols:** UART, SPI, I2C
- **Tools:** Keil, CubeMX
- **Soft skills:** teamwork, logical thinking, basic English communication
- **Others:** Github

### Personal Projects

#### Electronic Scale using STM32F103C8T6 and Loadcell

- Designed hardware and programmed in C to display weight on an LCD
- Calibrated sensor input and implemented signal noise filtering

#### 3-digit 7-Segment LED Display System (0–999) using PY32F030 (Cortex-M0)

- Implemented dynamic multiplexing to control 7-segment LEDs; split values into hundreds, tens, and units; achieved smooth display without flickering
- Used timer interrupt to refresh display every 10ms
- Controlled value on display via button, including debouncing and handling multiple press modes

#### Electronic Lock System

- Established UART communication between two microcontrollers
- Low-level GPIO Driver for STM32: developed custom GPIO initialization and control library using direct register access (bare-metal)

### Certificates

- Microcontroller Embedded C Programming: Absolute Beginners (Udemy)
- C Programming For Beginners - Master the C Language (Udemy)