

# Khanh Q. Chung

Senior Embedded Software & DevOps Engineer



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## About Me



Dear Sir/Madam,

My name is Khanh, and I'm a careful embedded software engineer with more than 8 years of experience. In addition, I have 2 years experience of working as a DevOps engineer guy. Don't have a lot on my plate like before, I'm currently just teaching some courses relating to programming at the university level.

I enjoy thinking deeply before writing code as well as having a curious mindset on how the different components fit together. I have worked with various languages, IDEs, Development Boards, Peripherals, and I'm really inspired by opportunities to work with something new but practical.

Besides, I gained a strong background in algorithms throughout a couple of years as a researcher.

Working in your company will be my best opportunity to show you my best. I'm looking forward to hearing answer from you soon.

## Education

### Bachelor of Computer Science, 2009

University of Science, Vietnam National University - Ho Chi Minh City

Excellent grade

### Master of Computer Science, 2012

University of Science, Vietnam National University - Ho Chi Minh City

Defended MSc thesis on topic "Study on Tag Anti-Collision using Time Division Multiple Access approach for the SELab MIFARE reader" with the mark as Excellent

## Experience

### Lecturer

Department of Embedded Systems and Robotics, University of Information Technology, Vietnam National University - Ho Chi Minh City

10/2015 - Now

<https://en.uit.edu.vn>

- Taught Embedded Systems Programming course which is about microcontroller programming for senior students. It is built around [STM32F429I-DISCO](#) kit.
- Taught Embedded Systems Design course which is based on [STM32F4G-DISC1](#).
- Taught Microprocessor and Microcontroller course for junior students. This course aims to introduce Intel 16-bit 8086 and 8-bit 8051.
- Taught Operating System course for sophomore students.

### IoT Team Leader, DevOps Engineer, Co-Founder

Leanwell Technology Co., Ltd

08/2017 - 04/2021

<https://www.leanwell.co>

*The company aims to make a whole system for manufacturing operations management (MOM) for small enterprises in Vietnam.*

- Led an IoT team to research and build product series including [LEANWELL IoT](#) and [LEANWELL IoT Wifi, Wifi Temperature and Humidity Sensor](#), Wifi AirQuality Sensor.
- And deployed 500+ above products in factories for three clients.
- Managed to bridge the gap between the software development team and IT operation guys at the client site: deploy software releases as quick as possible, ensure services are easily scalable as well as having ability of high availability, protect servers against hackers and viruses.
- Played the role of purchasing relating to various electronic components.
- Set up the production process of all company products.

### Embedded Software Researcher

Software Engineering Laboratory, University of Science, Vietnam National University - Ho Chi Minh City

12/2009 - 09/2015

<https://www.selab.hcmus.edu.vn>

*SELab was established in 2002 where I significantly gained knowledge from various types of research and leveled up my skills. I very much appreciate the time everybody spent for me when I was here.*

- Developed an ASM/C Compiler for a domestic 8-bit MCU named SG8V1.
- Built a time attendance system on [S3C2440 ARM9](#) board. The cool thing is that each user's fingerprint minutiae is stored in their RFID tag instead of using a centralized database.
- Built a MIFARE reader/writer using [RC522](#) MCU. This reader supports various kinds of MIFARE tag, such as 1K/4K, Ultralight and DESFire EV1.
- Created a data capture device via RS232 interface. This device will be plugged into a bill printer to collect every single byte of data printed.
- Played Technical Manager role in [Renesas Car Rally](#) which has been held at University of Science for every student in the Southern of Vietnam. [Take a look](#) at how this race is funny.

### Embedded Software Engineer, Co-Founder

ZenithTek Co., Ltd

02/2012 - 07/2015

*ZenithTek was a hightech startup founded in Vietnam in 2012 in which we mainly focused on improving operational efficiency of firms. The company went out of business after three years.*

- Led an embedded team to build a compact device named "Mini Terminal" that is similar to Raspberry PI. In order to make it, we chose STM32F4 series from ST as the main MCU and FreeRTOS as the real-time os for applications.
- We also created a hacked version of [this tape dispenser](#) in which an in-house board was injected into their original one to make it smarter.
- Deployed nearly 150 devices which closely integrated with our web applications on quality control lines in client's factories.
- The good news was that devices completely replaced paperwork and improved performance around 20%.
- Played HR and Office Administrator role.

### Embedded Software Internship

NXP Semiconductors Vietnam

09/2008 - 11/2008

*The laboratory where I did my thesis at had established a partner relationship with NXP Vietnam; therefore, I luckily had a chance to carry out the thesis under expert guidance and the professional workplace.*

- Developed a lightweight USB host library running on the MCB2388 evaluation board. This library complies with USB 2.0 Specification and provides three USB classes including Audio, Human Interface Device (HID) and Mass Storage.
- Applied version control principle to manage and track changes to code and assets across the USB project using SVN software.