# Bang Nguyen Huu

Gifu, Japan • hucancode@gmail.com • hucanco.de

# TECHNICAL SKILLS

Programming Languages: Rust, C++, GLSL, HLSL, Typescript, CSS, Java, Kotlin, SQL

Frameworks: OpenGL, nginx, React, Vue, Svelte, ThreeJS, Tailwind, NestJS, Strapi, Flutter, MySQL, WebGPU

OS: Windows, Mac, Linux (Debian, Arch, RHEL), Android, iOS

Languages: Vietnamese (Native), Japanese (JLPT N2), English (TOEIC 945)

# CERTIFICATIONS

Incentive Prize, Professional Division • National Olympiad of Informatics

2012

C++ Certified Professional Programmer • C++ Institute

2023

## **EXPERIENCE**

System Engineer Aug. 2022 - Present

NTQ Japan Gifu, Japan

- Taken part in software requirements hearing, bidding, proposal activities
- · Built complex and performant embedded applications used in buses and trains

Engineering Manager July 2020 - Aug. 2022

GoodCreate Kagawa, Japan

• Communicated with clients to to build responsive rich-featured EC websites

 $\bullet \ \ \text{Built full-featured performant cross platform mobile applications and web backend written using Flutter, NodeJS, nginx \\$ 

C++ Engineer
May 2019 - July 2019
FPT Software
Hanoi, Vietnam

Developed performant and feature-rich embedded applications

Developed performant and readure-field embedded applications

**Game Programmer** Mar. 2014 - Mar. 2016, Apr. - Nov. 2018

Gameloft HAN

Hanoi, Vietnam

- Developed, and optimized games for low-end mobile devices using C++, OpenGL, Android NDK, Unity3D, with large code base and complex build system
- · Contributed in: Order and Chaos 2, Brothers in Arms 3, Ice Age Adventure, Shark Dash and many other games

# **PROJECTS**

## **Hi-ABT** • Linux, Android, Java, C++, TCP/IP, Serial

July 2022 - Present

- · Worked with bare metal devices, handled low-level signals
- Built software system to manage bus fare. Worked with Java, C++, embedded devices
- Implemented remotely controlled software update mechanics
- Handled TCP, socket communications, REST API. Handled complex communications between many devices using various connection strategies, including LAN, serial, LTE
- Maintained a customized Android OS. Tweaked system boot procedure. Customized stock applications. Performed
  various fixes and maintained system stabability

#### **Toxy** • Flutter, Next JS, Nest JS, Google Cloud, Fastlane, Github Actions

Aug. 2021 - July 2022

- Built an app offering coupons based on user's location. Powered by a scalable backend server with NestJS, built to handle 50K/100K active users with  $70K \neq /100K \neq$  monthly budget
- Reduce potential server cost by designing Microservice architecture and utilizing Docker and Cloud Run. Estimated saving at about 40% compared to legacy method
- Utilized API caching/UI hydration mechanic, resulting in highly responsive app with virtually zero loading UX after first initial load
- Built a fully automated CI pipeline with Fastlane and Github Actions

- Managed an app making system, allowing users to build custom Android/iOS application with no technical prerequisite
- · Maintained an automated app building system, using Laravel, Fastlane, Nodejs, XCode
- Built highly customizable React Native applications, offering 9 different themes with feature set suitable for various kind of application: restaurant, apparel shop, hotel, taxi services, and more
- Support HTTPS with both manual and automatic methods

## **HKMC** • Qt, Linux, IVI, Embedded

Feb. 2017 - Nov. 2017

- · Built media playing application for automotive in-vehicle infortainment (IVI) system using Qt
- · Implemented lazy loading mechanic, handling thousands of song with small memory footprint
- Worked with large C++ code base. Utilized Coverity for static analysis

## **NSP64Bit** • *C++*, *Migration*, *String Matching*

Apr. 2016 - Jan. 2017

- Worked with C++, memory management, 64bit coding patterns
- Worked with large C++ code base with 2 millions line of code
- Solo developed a static analyzer to help cutting about 90% of manual effort. Analyzed C++ code content, process structured content with Regular Expression

# **EDUCATION**

## Mizuno School of Foreign Language

Japanese

Chiba, Japan *Apr. 2018 - Apr. 2019* 

## Hung Yen University of Technology and Education

BSc Software Engineering

Hung Yen, Vietnam

Sep. 2010 - June 2014