# Bang Nguyen Huu

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

# TECHNICAL SKILLS

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

Frameworks: ReactiveX, React, Svelte, Tailwind, NestJS, Flutter, Axum, WebGPU, OpenGL

Tools & OS: Mac, Linux (Debian, Arch), Android, iOS, Docker, nginx, MySQL, Redis, AWS, GCP

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

# 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

• Took part in requirements collecting, bidding, proposal activities. Proudly won engineer of the year 2023

• 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
- 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

#### 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

## NOTABLE 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, NextJS, NestJS, 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
- Reduce potential server cost by designing Microservice architecture and utilizing Docker and Cloud Run. Saved about 40% running cost 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. Built another similar pipeline with Gitlab CI

- Developed an app making system, allowing users to build and publish custom Android/iOS application with no technical prerequisite. Similar to Wix, but for mobile application
- Developed an automated app building system, using Fastlane, Nodejs, XCode
- Built highly customizable React Native applications, offering 9 different themes with feature sets suitable for various kind of application: restaurant, apparel shop, hotel, taxi services, and more

#### **HKMC** · Qt, Linux, Coverity, 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

# $NSP64Bit \cdot C++$ , Migration, Static Analysis

Apr. 2016 - Jan. 2017

- Worked with C++, memory management, 64bit coding patterns
- $\bullet\,$  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