## Bang Nguyen Huu

Chiba, Japan

Languages: C, C++, Rust, Go, Typescript, Java, Kotlin, SQL / Qt, React, Svelte, NestJS, Flutter Tools & OS: Docker, K8S, Terraform, Kafka, nginx, Redis, Linux, Android, iOS, AWS, GCP

## EXPERIENCE

## **Technical Leader** *NTQ Japan* (Gifu/Tokyo) 2022/08 - Present Built complex and performant embedded applications 2020/07 - 2022/07 Engineering Manager GoodCreate (Kagawa) • Communicated with end clients to build responsive feature-rich EC websites, cross platform mobile applications • In charge of engineering productivity. Conducted NodeJS, Flutter, iOS training activity C++ Programmer FPT Software (Hanoi) 2016/04 - 2018/03 • Developed performant and feature-rich embedded applications Game Programmer Gameloft (Hanoi) 2014/03 - 2016/03 • Developed, and optimized games for low-end mobile devices using C++, OpenGL • Contributed in: Order and Chaos 2, Brothers in Arms 3, Ice Age Adventure, and many other games NOTABLE PROJECTS SDA Terraform, Ansible, Kubernetes, AWS, ELK, Kafka, Go, Postgres 2024/10 - Present • Built a fault-tolerant data extractor using Go to analyze dynamic schema binary data (20MB/s) • Utilized Kafka Connect to support data ingress from Oracle, MSSQL, CSV, JSON • Processed 1M record/hour, on 2 t3a.large AWS EC2 nodes Hi-ABT Linux, Android, µITRON, Java, C, C++, TCP, Serial 2022/08 - 2024/07• Closely work with hardware team building software system to manage bus fare, with remote software update mechanics • Handled complex communications between many embedded devices of 3 types, using TCP, Serial, HTTPS • Customized Android OS boot procedure, applied various fixes and maintained system stability Poker Simulator Rust, WASM, Svelte 2023/11 - 2023/12 • Built a winning odds calculator for poker game (0.25M game per second). Try it live Rubik & Dragon Rust, WebGPU 2023/11 - 2024/02 • Built complex animated scene using WebGPU. See more: github/hucancode/rubik and dragon **Toxy** Flutter, NextJS, NestJS, Google Cloud, Fastlane, Github Actions 2021/08 - 2022/07 • Collect requirements, design and built a location-based coupon offering app with Flutter, NextJS, NestJS • Optimized 40% server cost by migrating to Cloud Run. Built a fully automated CI pipeline with Fastlane • Utilized caching/UI hydration mechanic, resulting in highly snappy UX after first load AtCreator Laravel, Fastlane, React Native, XCode CLI 2020/07 - 2022/07• Developed an app making system using ReactNative, 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 CLI **HKMC** Qt, Linux, Coverity, IVI, Embedded 2017/02 - 2017/11 • Built media playing application for automotive in-vehicle infotainment (IVI) system using Qt • Implemented lazy loading mechanic, optimized to handling thousands of songs with small memory footprint • Fixed memory leaks, reduced object copy, optimized system performance. Utilized Coverity for static analysis 2016/04 - 2017/01 **NSP64Bit** C++, Migration, Static Analysis • Migrated 2M lines of code in C++ from 32bit to 64bit environment

• Built a RegExp-based static analyzer for C++ source code, automated about 90% of human effort

## EDUCATION & CERTIFICATIONS

Incentive Prize, Professional Division National Olympiad of Informatics	2012
University of Technology and Education BSc Software Engineering	$\boldsymbol{2014}$
C & C++ Certified Professional Programmer $C++$ Institute	2023
Certified Solution Architect Associate Amazon Web Services	2024