

Bang Nguyen Huu

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TECHNICAL SKILLS

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

Frameworks: OpenGL, ReactiveX, React, Vue, Svelte, Tailwind, NestJS, Strapi, Flutter, Jetpack Compose, Axum, Tokio, WebGPU

Tools & OS: Windows, Mac, Linux (Debian, Arch, RHEL), Android, iOS, Docker, nginx, MySQL

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 *Gifu, 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 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 stability

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, built to handle 50K/100K active users with 70K ¥ /100K ¥ 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

AtCreator · *Laravel, Fastlane, React Native, XCode CLI*

July 2020 - July 2022

- Maintained 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
- Maintained an automated app building system, using 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 infotainment (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

Chiba, Japan

Japanese

Apr. 2018 - Apr. 2019

Hung Yen University of Technology and Education

Hung Yen, Vietnam

BSc Software Engineering

Sep. 2010 - June 2014