

## TECHNICAL SKILLS

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**Programming Languages & Frameworks:** Rust, C++, C#, GLSL, Typescript, Java, Kotlin, SQL, ReactiveX, React, Svelte, Tailwind, NestJS, Flutter, Axum, WebGPU, OpenGL

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

## EXPERIENCE

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**System Engineer** *NTQ Japan (Gifu, Japan)* Aug. 2022 - Present

- Built complex and performant embedded applications for buses and trains

**Engineering Manager** *GoodCreate (Kagawa, Japan)* July 2020 - Aug. 2022

- Communicated with end clients to build responsive feature-rich EC websites
- Built cross platform mobile applications and web backend written using Flutter, NodeJS, nginx

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

- Developed performant and feature-rich embedded applications

**Game Programmer** *Gameloft (Hanoi, Vietnam)* Mar. 2014 - 2016, Apr. - Nov. 2018

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

## NOTABLE PROJECTS

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**Hi-ABT** · *Linux, Android, Java, C++, TCP/IP, Serial* July 2022 - Present

- Built software system to manage bus fare. Worked with Java, C++, Linux, embedded devices
- Implemented remote software update mechanics. Handled complex communications between many devices using various connection strategies, including TCP, Serial, HTTP
- Customized Android OS boot procedure. 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
- 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 snappy UX after first initial load
- Built a fully automated CI pipeline with Fastlane and Github Actions. Done similar pipeline with Gitlab CI

**AtCreator** · *Laravel, Fastlane, React Native, XCode CLI* July 2020 - July 2022

- 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

**HKMC** · *Qt, Linux, Coverity, 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, Static Analysis* Apr. 2016 - Jan. 2017

- Worked with C++, memory management, 64bit coding patterns in a large 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 & CERTIFICATIONS

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**Mizuno School of Foreign Language** *Japanese (Japan)* 2019

**Hung Yen University of Technology and Education** *BSc Software Engineering (Vietnam)* 2014

**Incentive Prize, Professional Division** · *National Olympiad of Informatics* 2012

**C++ Certified Professional Programmer** · *C++ Institute* 2023