

SKILLS

Languages: C, C++, Rust, Typescript, Java, Kotlin, SQL

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

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

EXPERIENCE

Software Engineer *NTQ Japan (Gifu, JP)* Aug 2022 - Present

- Built complex and performant embedded applications

Engineering Manager *GoodCreate (Kagawa, JP)* Jul 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, VN)* May 2019 - Jul 2019

- Developed performant and feature-rich embedded applications

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

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

NOTABLE PROJECTS

Hi-ABT · *Linux, Android, Micro Itron, Java, C, C++, TCP, Serial Communication* Aug 2022 - Present

- Built software system to manage bus fare
- Implemented remote software update mechanics
- Handled complex communications between devices running 4 different OS, using TCP, Serial, HTTPS
- Implemented OS network setup procedure, managing static IP, route table, internet gateway, DNS
- Customized Android OS boot procedure, applied various fixes and maintained system stability

Toxy · *Flutter, NextJS, NestJS, Google Cloud, Fastlane, Github Actions* Aug 2021 - Jul 2022

- Collect requirements, design and built a location-based coupon offering app with Flutter, NextJS, NestJS
- Optimized server cost with Cloud Run. Reduced about 40% running cost compared to on-premise method
- Utilized API caching/UI hydration mechanic, resulting in highly snappy UX after first load
- Built a fully automated CI pipeline with Fastlane and Github Actions/Gitlab CI

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

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, optimized to handling thousands of song with small memory footprint
- Fixed memory leaks, reduced object copy, optimized system performance. 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 2M LOC
- Developed a static analyzer to help cutting about 90% of human effort. Analyzed C++ code content, process structured content with Regular Expression

EDUCATION & CERTIFICATIONS

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

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

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

Certified Solution Architect Associate · *Amazon Web Services* 2024