# Bang Nguyen Huu

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## TECHNICAL SKILLS

Languages & Frameworks: Rust, C++, GLSL, HLSL, Typescript, CSS, Java, Kotlin, SQL / OpenGL, nginx,

NextJS, React, Vue, Svelte, ThreeJS, Tailwind, NestJS, Strapi, Flutter, MySQL, WebGPU

OS: Windows, Mac, Linux (Debian, Arch, RHEL), Android, iOS

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

## 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

- Built complex and performant embedded applications used in buses and trains
- Maintained full-stack web applications using Vue, Django
- Taken part in software requirements hearing, bidding, proposal activities

## Engineering Manager

July 2020 - Aug. 2022

GoodCreate

Kagawa, Japan

- Communicated with clients to to build responsive rich-featured EC websites
- Trained and develop team members in: Networking, Linux, HTML/CSS, React, Flutter
- Built full-featured performant cross platform mobile applications
- Utilized modern HTML/CSS to build aesthetic responsive EC web applications
- Maintained web backend written in Laravel, NodeJS, nginx. Support HTTPS with both manual and automatic methods

C++ Engineer May 2019 - July 2019

FPT Software

Hanoi, Vietnam

- Worked with large C++ code base. Performed static analysis using Coverity
- Developed performant and feature-rich embedded applications

#### Game Programmer

Mar. 2014 - Mar. 2016, Apr. - Nov. 2018

Gameloft HAN

Hanoi, Vietnam

- Worked with C++, OpenGL, GLSL, HLSL, Android NDK, Box2D, Unity3D
- Analyzed, optimized complex games to run on low-end mobile devices
- Worked with large and complex C++ project and build system
- Contributed in: Order and Chaos 2, Brothers in Arms 3, Ice Age Adventure, Shark Dash and many other games

### 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

- 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 50 K/100 K active users with  $70 \text{K} \neq /100 \text{K} \neq monthly budget}$
- 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

- Managed an app making system, allowing users to build custom Android/iOS application with no technical prerequisite
- Maintained an automated app building system, using Laravel, 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

#### **HKMC** | Qt, Linux, 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** $\mid C++, Migration, String Matching$

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

Japanese

## Hung Yen University of Technology and Education

BSc Software Engineering

Mizuno School of Foreign Language

Hung Yen, Vietnam

Sep. 2010 - June 2014

Chiba, Japan

Apr. 2018 - Apr. 2019