
SKILLS

Languages: C, C++, Rust, Go, WebGPU, Vulkan, OpenGL

Tools & OS: Unreal Engine, RenderDoc, Linux, AWS, GCP

EXPERIENCE

Technical Leader 2022/08 - Present

- Lead teams building complex and performant embedded and web applications

Senior Software Developer 2020/07 - 2022/07

- Communicated with end clients to build responsive feature-rich EC websites, cross platform mobile applications
- In charge of engineering productivity. Conducted various training activity

C++ Programmer 2016/04 - 2018/03

- Developed performant and feature-rich embedded applications

Game Programmer 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

Mjolnir *Odin, Vulkan* 2025/01 - Present

- Built a rendering engine using Vulkan featuring: PBR, Post Processing, Skinned Animation, Deferred Rendering, Bindless Rendering, 2D Sprite, UI System. See more: [github/hucancode/mjolnir](https://github.com/hucancode/mjolnir)
- Utilized XCode and RenderDoc to analyze and optimize render calls
- Utilized compute shader to build occlusion culling and particle simulation engine

Raytracer *Rust, WebGPU* 2024/02 - 2024/05

- Built a Raytracer with BVH that can handle 100K triangles in realtime. See more: [github/hucancode/raytracer](https://github.com/hucancode/raytracer)

Dragon *Rust, WebGPU* 2023/11 - 2024/02

- Built a procedurally animated dragon flying scene using WebGPU. See more: [github/hucancode/dragon](https://github.com/hucancode/dragon)

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](#)

SDA *Terraform, Ansible, Kubernetes, AWS, ELK, Kafka, Go, Postgres* 2024/10 - 2025/03

- Leveraged ELK stack to ingress and analyze application logs data
- Built a fast data processor using Go to analyze proprietary dynamic binary data format
- Processed millions of new record daily, on just 2 t3.large AWS EC2 nodes

Hi-ABT *Linux, Android, μITRON, Java, C, C++, TCP, Serial* 2022/08 - 2024/07

- Closely work with hardware team building bus fare payment system with remote software update
- Handled complex communications between many embedded devices of 3 types, using TCP, Serial, HTTPS

HKMC *Qt, Linux, Coverity, IVI* 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

EDUCATION & CERTIFICATIONS

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

University of Technology and Education *BSc Software Engineering* 2014

Knight level (Top 2.13%) *Leetcode* 2023

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

Certified Solution Architect Associate *Amazon Web Services* 2024