Elliot Chung

Full Stack Software Engineer
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Skills

- **Languages:** JavaScript/TypeScript, Python, C/C++, Go, Rust, Java, Kotlin
- **Frameworks/Technologies:** React, VueJS, NodeJS, TensorFlow, PyTorch, CUDA, Android, Embedded Systems
- **Infrastructure & Cloud:** AWS (Lambda, DynamoDB, S3, EC2), Docker, Linux
- **Developer Tools:** Git, Github, Cursor, Claude Code, VSCode, Figma

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Work Experience

Franklin Wireless - La Mesa, CA *Software Engineer* July 2024 – Present

- Architected and delivered full-stack features for an MDM platform serving thousands of clients, using VueJS, AWS Lambda, and DynamoDB.
- Led the end-to-end development of a new user dashboard, translating Figma designs into a responsive VueJS front-end, and coordinating AWS services to populate it.
- Designed and implemented a server-side caching mechanism for a child monitoring platform, filtering non-essential network requests. This reduced the projected storage load by 90% and improved UI history clarity for parents.
- Owned the development and execution of on-device AI demonstrations for CES 2024, showcasing real-time Facial Recognition and OCR on Qualcomm SoCs.
- Spearheaded R&D for deploying optimized AI models on resource-constrained 32-bit microcontrollers, creating a proof-of-concept for future products.

Personal Projects

Custom Programming Language & Cloud Compiler | GitHub | Website

- Developed a LISP style compiled language from scratch to understand language concepts.
- Implemented a lexer, parser, and code generator in Rust to produce x86 assembly.
- Exposed the compiler via a Go-based REST API, allowing for cloud compilation from a React front-end.

C++/CUDA Ray Tracing Engine | GitHub

- Built a ray tracing engine in C++ and CUDA to explore physically simualted graphics algorithms.
- Implemented a Monte Carlo path tracer to render photorealistic images with global illumination, soft shadows, and reflections.
- Features a real-time UI for interactive scene editing

Full-Stack Rubik's Cube Solver | GitHub | Website

- Created a full-stack web application that solves any Rubik's Cube state from a user's input.
- Implemented Thistlethwaite's algorithm in a Python backend to efficiently search the solution space by reducing the problem to a series of smaller subgroup manipulations.
- Designed and built a responsive and interactive React front-end for cube state visualization and input.

Education

University of California San Diego
B.S. Computer Science | *Business Minor*
September 2018 – June 2022