

Chu Yi Herr

[LinkedIn](#) | 559-908-8784 | heraaronhotmail@gmail.com | [Github](#)

Skills

- C | C++ | Java | Python | Git | JSON | OpenGL | Vulkan | OpenCL | CUDA | NoSQL | Agile | GDB | Unix Shell Scripting
- Software Engineering | Linux | Compilers Design | GPU Development | OOP | Kernel Development | CI/CD | Computer Architecture | Operating System | Distributed Systems | Graphics Algorithms
- Robotics | Embedded Systems | Firmware | Networking (TCP/UDP) | Communication Protocols (I2C, SPI, UART, IoT) | Docker Container

Experience

Software Engineer	UC Berkeley	Berkeley, CA, USA	10/2022 - 04/2024
<ul style="list-style-type: none">• Led in the designing and developing of UI applications for the end-user, increasing usability by 10 – 15% using the latest technologies of C++, Qt, and QtCreator.• Developing LLSM GUI applications for multiple platforms, Mac and Linux.• Implement scalable plugins back-end using Java and Javax and managed the UI design for those plugins.• Initiated in creating multiple innovative solutions for that tackle new problems on multiple projects.• Hosted meetings discussing application requirements and software dependencies for workload balancing, software implementation, testing, and configuring metrics systems.• Continuous Integration/Deployment pipeline integration, pull requests, code reviews, load/stress testing, unit/integration/e2e testing.			

Education

Bachelor of Science	San Francisco State University	San Francisco, CA	05/2025
<ul style="list-style-type: none">• Major in Computer Science			
Associates of Science	Clovis Community College	Clovis, CA	05/2023
<ul style="list-style-type: none">• Major in Computer Science			

Projects

- **A-Compiler:** Designing own compiler called A-Compiler (C++, ARM64). Link to the [GitHub](#) (02/2024)
- **ENGINE3D:** Creator of a 3D Game Engine (C++, OpenGL). Here is the link to the project [GitHub](#) (02/2024)
- **MINI-ENGINE3D:** Developed a mini version of Engine3D using C++ and Vulkan. Link to the project, [GitHub](#) (02/2024)
- **Rocket-Game:** Using Engine3D to develop a rocket game. Link to the game made by Engine3D is [GitHub](#) (01/2023)
- **Libhal-Soft:** Porting over different drivers such as **lpc40**, **CAN**, **ADC**, **DAC** for adding support to different arm chips. Contributing to this Open-Source project. (12/2023)
- **NovaOS:** Developing an Operating System called NovaOS developed using **x86** assembly and **C/C++** (12/2023)
- **Holographic Projection:** Lead, designer, and developer of a class group project developing a holographic projector using multiple sensors to give it capabilities to interacting with users (03/2022)
- **Log Script:** Assisted in collaboratively working with my professor, developing a bash script. Using the script for as a student anti-cheat detector that checks for anomalies when students submit their hands-on programming homework using Linux utility commands. (06/2023)

Clubs

- **SJSU Robotics:** Member on the Intelligence Systems team. Collaborating in calibrating firmware of the GPS, Compass, and Lidar sensors to help retrieve data for the autonomous rover navigation system using **Python**, implementing machine learning algorithms.