





Chu Yi Herr

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Skills

- C | C++ | Java | Python | Git | JSON | MSSQL | OpenCL | CUDA | Robotics | NoSQL | Agile | GDB | x86/ARM32 assembly
- Software Engineering | Data Structures & Algorithms | OOP | Kernel Development | CI/CD | Unit Testing | Agile | Operating System
- Robotics | Distributed Systems | Firmware | Networking (TCP/UDP) | Communication Protocols (I2C, SPI, UART, IoT) | Docker

Experience

Software Engineer

UC Berkeley

Berkeley, CA, USA

10/2023 - 04/2024

- 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. Link to [GitHub](#) of the Open-Source project.
- 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

01/2024 – 05/2026

- Major in Computer Science

Projects

- **A-Compiler:** Designed and implemented my own compiler and programming language called A++. Link to [GitHub](#) for compilers. (02/2024)
- **ENGINE3D:** Creator of a 3D Game Engine (C++, OpenGL). Link to [GitHub](#) showing the engine's usability. (02/2024)
- **Rocket-Game:** Using Engine3D to develop a rocket game. Link to the [GitHub](#) showing the game developed using Engine3D (012/2023)
- **Native File Dialog:** As part of Engine3D, developed the Mac native file dialog using C++ and Cocoa.
- **Libhal-Soft:** Porting over different drivers such as **lpc40, CAN, ADC, DAC** for adding support to different arm chips. (12/2023)
- **NovaOS:** Creator, designer, and developer of an Operating System called **NovaOS** developed using x86 and 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**.
- **Chinese Club:** President of the Chinese Club for 2 years. Showcasing leadership and planning of club events. Planned workshops in learning more about Chinese culture and the history.