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 | Embedded Linux | Embedded Systems | OOP | Kernel Development | CI/CD | Unit Testing | Agile | Operating System | Intel/AMD microprocessors
- 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.
- 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-Compiler. Here is the 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)
- Rocket-Game: Using Engine3D to develop a rocket game. Link to the game made by Engine3D is GitHub (012/2023)
- Native File Dialog: As part of Engine 3D, 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. Contributing to this Open-Source project. **(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**.