Chu Yi Aaron Herr

Fresno, CA 93722 | (599) 908-8784 | heraaronhotmail@yahoo.com | https://www.linkedin.com/in/aaron-her

https://github.com/SpinnerX

OBJECTIVE: Software Engineer in Embedded Systems who is seeking experiences and opportunities with Embedded Systems.

EDUCATION

B.S., Computer Science May 2025

San Francisco State University, San Francisco, CA

A.S., Computer Science May 2023

Clovis Community College, Clovis, CA, GPA: 3.13

TECHNICAL SKILLS

Programing - C, C++, Java, Python

Skills – CMake, Software Design Patterns, Agile, Scrum methodologies, Concurrency development, compile-time optimization, computer architecture, Operating Systems, GDB, automating scripting, terminal utilities for Unix and Linux OS

WORK EXPERIENCE

University of California Berkey, Berkeley, CA September 2022 - Present

- Worked for the Advance bio-imaging center at UC Berkeley to develop applications using modern C++ along with the QT framework.
- Role involved working on problem solving and handling errors, such as race conditions with sub processes in a multi-threaded environment.
- Part of my role involved myself in scheduling meetings which allowed me to showcase my ability to work independent.
- Effectively communicating with mentor at meetings about release dates and deadlines, showcasing my ability to manage my time.

PROJECT EXPERIENCE

6502 CPU Emulator | Personal Project | GitHub Spring 2023 - present

- Implementing an 8-bit CPU the 6502, including the fetch, decode, and executing cycles.
- Reading the 6502-microprocessor datasheet.
- Implementing instructions fetch specific opcodes to do specific operations.

6502 CPU Emulator | Personal Project | GitHub

- Reverse engineering the 6502 8-bit processor.
- Implementing the fetch, decode, and execute cycle for the 6502.
- Analyzing the 6502 microprocessor datasheet
- Representing the 6502 chip using a higher level language, C++.
- Project offered practical applications in looking to emulating an 8-bit processor chip.

Libhal Framework | Opensource Contributor | GitHub Summer 2023 - present

- Contributing to mentor's robotics framework Libhal in implementing common protocols such as CAN and UART.
- Implementing a driver serial port taking in N number of serial ports, that writes downstream of serial ports.