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**  San Francisco State University, San Francisco, CA |  |  |  | May 2025 |
| **A.S., Computer Science**  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** |  |  |  | May 2023 |
| **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.