Chu Yi Aaron Herr

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Education

B.S., Computer Science   Fall 2025

San Francisco State University, San Francisco CA

A.S., Computer Science

Clovis Community College, Clovis, CA, GPA 3.13

Software Technical Skills – C++, Python, Git, Bash/Zsh Shell Scripting, Linux/Unix, Concurrency, Software Design Patterns, Agile, Scrum, GUI Development, GDB/Debuggers, Test Driven-Development(TDD), Data Structures Algorithms, Discrete Math

WORK EXPERIENCE

University of California Berkeley, Berkeley, CA   September 2022 – Present
- Developed GUI Applications using C++ and the Qt framework.
- Contributed to designing the UI using QtCreator to design widget panels.
- Implemented docking windows that allow to display real time data to docking windows.
- Participated in meetings regarding designing and implementing new features.
- Worked in a multithreaded environment where managed worker threads have process for streaming data to the docking windows, where users can receive feedback.

Project Experience

Game Engine in OpenGL | GitHub   Fall 2023 – Present
- Created in C++ a Game Engine for fun, what other way then to build a Game Engine from Scratch.
- Developed this Game Engine using C++, and OpenGL/GLFW rendering APIs for the graphics.
- Things learned when developing this engine was serializing/deserializing data to YAML files.
- Batch rendering multiple quads together, reducing the number of quads created.
- Understanding how an Entity Component System is used in a large engine of this scale.

6502 Emulator | GitHub   Fall 2023 - Present
- Reversed engineered an 8-bit processor called the 6502.
- Emulated how virtual ram and rom read, write data to and from virtual memory.
- Developed the adder functions for the ALU as part of the emulator to do basic arithmetic operations.

Asm Compiler
- In Computer Architecture, an assignment assigned by the professor was to make a simple visual basic compiler.
- The purpose is to teach how C++ works with assembly.
- Utilizing assembly to handle conditional, and arithmetic.
- Whereas using C++ to handle command and string parsing, including tokenizing commands to do basic visual basic logic.

CLUB/ACTIVITIES

SJSU Robotics Club | GitHub   Fall 2023 – Present
- Worked in the Intelligence Systems division, collaborating and working with my team on the autonomy side of building the rover.
- Worked in fixing the GPS locking connection to the satellite.