#### Chu Yi Aaron Herr

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### **Education**

B.S., Computer Science Fall 2025

San Jose State University, San Francisco CA

### A.S., Computer Science

Clovis Community College, Clovis, CA, GPA 3.13

**Software Technical Skills** – C/C++, Java, Python, CMake, Data Structures and Algorithms, Object Oriented Programming, Operating Systems, Unix/Linux, Software Design Patterns, Agile/Scrum Methodologies, Multithreaded/Concurrency development, Valgrind/Calgrind, virtual memory analysis, Networking, OpenGL, Vulkan, Parallel Processing

### **WORK EXPERIENCE**

#### University of California Berkeley, Berkeley, CA

September 2022 - Present

- Using C/C++, using the Qt framework and it's QMake build system.
- Developed multiple worker threads that stream data to the docking windows.
- Working with worker threads containing a single source process for streaming data to the user.
- Gave informative information about current updates of ongoing tasks, that were given.
- Greatly showing my curiosity, and eagerness to learning in a quick and fast-paced environment, while still pursuing my degree in Computer Science.

# **Project Experience**

# Game Engine in OpenGL | GitHub

Fall 2023 - Present

- Inspired in developing my own game engine to dive in working with different complex systems.
- Implemented batch rendering to minimize draw calls.
- Have a UI editor to edit scenes runtime.
- Profiling tooling to help monitor function runtimes.
- Used the OpenGL rendering API's for drawing quads.

## 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.

# **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.
- Developed using python, and various machine libraries such as Numpy to efficiently improve the rover for robotics competition.
- Worked in fixing the GPS locking connection to the satellite.