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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, Bash scripting, Linux/Unix, CPU Design, Verilog/VHDL, GDB/Debuggers, Assurance Testing, Data Structures Algorithms, Discrete Math, neovim

WORK EXPERIENCE

University of California Berkeley, Berkeley, CA

September 2022 - Present

- Using C++, using the Qt framework and it's QMake build system.
- Doing bug fixes for the UI that is built and designed using Qt's QTCreator.
- Developed multiple worker threads that have a single source process for streaming data to docking windows, doing
 multithreaded programming.
- Perform standard software design practices in designing the User Interface with Qt.
- Assisted in developing integration testing using Qt's QTest framework and continuous unit testing in the code base core.

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.