Rockwood Frank

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Work Experience

Student Technician Assistant — Cal Poly College of Architecture Support Shop
San Luis Obispo, CA — September 2023 – Present
Oversaw general safety and comprehension of tool use for a machine shop used by several hundred students per week. Led safety training, maintained various CNC, electronic, and hand operated tools on a daily basis. Was commissioned to and successfully built a storage shelf now located in the department office.

Frame Assembly Technician — Wood's Powr-Grip
Laurel, MT — June 2022 – August 2022
Worked with a team to assemble large scale frames for use in glass pane lifting on construction sites. Focused on electronic components and wiring for control systems. Tested finished parts to assure quality.

Receptionist — Grizzly Peak Animal Hospital
Red Lodge, MT — June 2020 – August 2021
Coordinated appointments and surgical operations in a veterinary clinic. Oversaw feeding and care of animals during the time of their stay. Led new employee training and created competitive report analysis on other clinics.

Projects

RISC MCU — Implemented and simulated a complete RISC-V MCU using System Verilog, including advanced CPU functions such as pipelining and multilevel cache.
Study Group Location App — Prototyped and built a shareable location app specific to a designated location or university for use among students. Made with React, the application combines open source map software with a light backend to share information.
Graphical Data Interface — Designed a hardware implementation of a VGA graphics card using System Verilog and a Basys 3 board, capable of displaying images loaded into a limited memory.
Remote Receiver and Tachometer — Designed, tested, and constructed a signal receiver and frequency tachometer using a combination of active and passive electronic components.
Remote Low Voltage Sensor — Planned and built a diode-based low voltage sensor and transmitter, as well as a subsequent receiver, with an effective range of 8 feet.

Skills

- Programming Languages: Java, Python, C#/.NET, C++, Javascript, HTML, System Verilog
- Computer Architecture & Operating Systems
- Analog & Digital Circuit Design & Lab Testing
- Microsoft Office

Classes

Computer Architecture
Digital and Analog Circuits
Systems Programming
Assembly Language Programming
Computer Security
Discrete Structures

Organizations & Extracurriculars

Cal Poly Mustang Band — Alto Saxophone, Orientation Leader 2023
Kappa Kappa Psi Iota Pi — Vice President 2023-24, Webmaster 2025

Education

California Polytechnic State University, San Luis Obispo GPA: 3.393
Third Year, Expected Graduation: June 2026
Bachelor of Science in Computer Engineering