



Education

California State University, Chico

Master of Science, Computer and Electrical Engineering, GPA: 3.65

Chico, CA

Expected May 2026

- Focus Areas: Embedded Systems, Digital Control, Secure Distributed Systems
- Relevant Coursework: Advanced Embedded Systems; Digital Control Using AI; Secure Distributed Computing; Machine Learning for Engineers

California State University, Chico

Bachelor of Science, Computer Engineering, Core GPA: 3.2, Overall GPA: 2.5

Chico, CA

May 2025

- Relevant Coursework: Real-Time Embedded Systems; Signals, Systems & Transforms; Digital Systems Design; Algorithms and Data Structures; Probability & Statistics; Linear Circuits I & II

Technical Skills

Programming: Python, C, C++, ARM Assembly, x86 Assembly

Test & Automation: Python-based test automation, expected-vs-actual validation, CSV-based data analysis

Embedded & Hardware: FPGA systems, hardware-in-the-loop testing, sensors, DAQ, oscilloscopes, power supplies

Controls & Analysis: PID control design, closed-loop system modeling, MATLAB data cleaning

Interfaces: SPI, I2C, UART, USB, TCP/IP (academic and project use)

Systems & Tools: Linux, SSH, Git (Agile workflows), Bash, Makefiles, MATLAB, VS Code

Experience

Research Fellow — Hardware Test & Secure Systems

Nov 2024 – Aug 2025

California State University, Chico

- Designed and tested FPGA-based computation systems with a strong emphasis on correctness, reliability, and verification.
- Developed Verilog modules and comprehensive test benches to validate functionality against expected behavior.
- Wrote supporting C/C++ and Python software to automate test execution and validate program output against known-good results.
- Documented test procedures, results, and failure modes to support repeatable verification workflows.
- Integrated hardware and software components and systematically isolated failures by testing power, connections, hardware, and firmware to identify root cause.

IT Systems Support Technician

Mar 2024 – Present

CSU Chico ITSS

- Troubleshoot hardware and software issues in Linux and Windows environments, including remote debugging over SSH.
- Supported large-scale system deployments and automated provisioning pipelines for 900+ devices.
- Followed structured debugging and documentation practices in a production support environment.

Systems Test Engineer Intern

May 2020 – Aug 2020

Viasat — Carlsbad, CA

- Assembled, tested, and debugged communication hardware using engineering schematics and test procedures.
- Developed C++ and JavaScript diagnostic tools to support system validation and fault isolation.
- Worked within Agile development workflows alongside hardware, software, and test teams.

Projects & Leadership

Payload Systems Lead — Chico Rocketry & Aerospace Club

- Designed and implemented a PID-controlled air brake system to influence rocket flight dynamics.
- Developed sensor payloads and conducted hardware in the loop testing to validate behavior before flight.
- Executed pre-flight testing, supported launch operations, and analyzed post-flight data to evaluate motor performance and recovery loads.
- Used MATLAB to clean and analyze sensor data, including modeling snatch forces during parachute deployment.