

CARSON WEBSTER

☎ (619)302-8234 ✉ carsonwebster@hotmail.com  [linkedin.com/in/carsonwebster](https://www.linkedin.com/in/carsonwebster)  github.com/carsonwebster

Summary

Space systems engineer with expertise in spacecraft ground software development, supporting both pre-launch integration and active on-orbit missions. I am eager to expand my skills beyond my current specialization to master the complete scope of spacecraft engineering and operations, contributing to future missions from concept through flight.

Experience

Lockheed Martin

February 2025 – Present

Software Engineer

Palo Alto, California

- Member of the Flight Software team in the Science and Instrumentation department, specializing in ground software development, electronic ground support equipment (EGSE), and spacecraft test environments.
- Support the integration and test phase of the Multi-slit Solar Explorer (MUSE) mission, among others, developing ground systems for spacecraft subsystem and instrument testing.
- Design and develop spacecraft telemetry and commanding ground systems to support pre-flight checkout, integration, and testing of scientific space instruments.
- Create and deploy EGSE and custom software to interface with in-development flight hardware, enabling real-time telemetry display, automated limit checking, and spacecraft commanding over SpaceWire, Ethernet, and serial links.
- Act as test conductor for optical sensor performance testing in thermal vacuum environments, ensuring accurate characterization under simulated space conditions.
- Work with multidisciplinary engineering teams to ensure smooth hardware–software integration and compliance with mission requirements.

Lockheed Martin via Point Solutions Group

April 2024 – February 2025

System Engineer

Sunnyvale, California

- Subject matter expert for satellite telemetry ground systems in a Mission Control and Operations Center for a MILSATCOM program; managed operation and maintenance of eight data acquisition, distribution, and archival systems, delivering 99.9% uptime.
- Led enhancements to real-time satellite data delivery pipelines, improving accuracy and timeliness of spacecraft health and status information for mission operations teams.
- Managed and secured mission-critical servers, keeping compliance with cybersecurity standards through regular audits, patching, and system hardening.

Science Applications International Corporation

November 2023 - April 2024

IT Service Desk Analyst

Coronado North Island Naval Base, California

- Provided technical support for software and network issues, ensuring rapid resolution and high client satisfaction.
- Improved departmental efficiency by streamlining documentation, system updates, and support workflows.

Education

University of California, Santa Cruz

June 2023

Bachelor of Science in Computer Science, minor in Technical Information Management

Santa Cruz, California

Certifications

Active Security Clearance: February 2024

CompTIA Security+: June 2023-2026

Technical Skills

Languages: C, C++, Rust, Python, Java, Bash

Developer Tools: Vim, Docker, Git, Jira, Real-Time Linux, VxWorks Workbench, Galaxy/ITOS C3M, Cosmos C3M.

Current Specialization: Spacecraft telemetry & commanding systems, flight/ground integration, hardware–software testing, EGSE development

Extracurricular

Slug Security

Winter 2022 – Spring 2023

Member

Univeristy of California, Santa Cruz

- Member of Slug Security, contributing to top finishes in national competitions including MITRE CTF (2nd, 2023), NSA Codebreaker Challenge (3rd, 2022), and DOE CyberForce (9th, 2022).