Carson Webster

carsonwebster.com

github.com/carsonwebster

Experience

Lockheed Martin via Point Solutions Group

April 2024 - Present

System Engineer

Sunnyvale, California

- Satellite telemetry systems SME responsible for developing and maintaining eight active Telemetry Record and Receive (TRR) and Telemetry Distribution and Archive (TDA) systems, ensuring 99.9% system uptime. Spearheaded improvements in real-time satellite data distribution to analysts' InControl clients, enhancing data accuracy and enabling critical decision-making for satellite health and operations.
- Developed, maintained, and debugged EGSE flight and test software, optimizing VxWorks real-time Linux modules and enhancing Tcl/Tk and Python client GUI/control servers. Improved C socket data distribution services and implemented automated service restart procedures, eliminating the need for weekly manual interventions and increasing system reliability.
- Conducted hardware-software integration and system testing, ensuring alignment with mission operation requirements and facilitating seamless subsystem integration for satellite telemetry systems.
- System administrator for 30 Solaris systems interfacing with TRR/TDAs, ensuring full DISA STIG and cybersecurity compliance. Managed regular audits, patch deployment, and system hardening to mitigate risks and maintain operational security.
- Collaborated with cross-functional teams to verify telemetry decryption and command data processing, applying spacecraft telemetry and command concepts to support critical system operations.

Science Applications International Corporation

November 2023 - April 2024

IT Service Desk Analyst

Coronado North Island Naval Base, California

- Delivered rapid and accurate technical support, resolving hardware, software, and network issues efficiently.
- Built strong client relationships by guiding users through issue resolution and collaborating with specialists on complex cases, ensuring high customer satisfaction.
- Streamlined departmental operations by managing documentation, performing system tests and updates, and optimizing support workflows to increase efficiency.

Code Ninias

February 2019 - January 2020

Lead Tutor

San Diego, California

- Led after-school computer science game development program for children aged 7-14, fostering programming skills.
- Directed summer camp programming classes and STEM activities, ensuring a fun, educational experience for students.
- Designed and developed a prototype for a pathway progress tracker to identify and notify staff when students began falling behind in the curriculum, improving student retention and progress monitoring.

Education

University of California, Santa Cruz

September 2019 – June 2023

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

Santa Cruz, California

Certifications

Active Secret Security Clearance: February 2024

CompTIA Security+: June 2023 - 2026

Technical Skills

Languages: C, C++, Python, Java, Bash, Tcl/Tk, Rust, GoLang, SQL, TypeScript, HTML/CSS, Powershell Developer Tools: Vim, Docker, Git, Ansible, Jira, Real-Time Linux, VxWorks RTOS, Hardware-in-the-Loop Simulators Current Specilization: Flight Software Development, Satellite Telemetry Systems (EGSE), HW-SW Integration, C Socket Programming, Telemetry Decryption/Decommutation, Unix Systems, Spacecraft Command and Telemetry, CI/CD Pipelines, System Testing, Container Scalability & Reliability

Extracurricular

Slug Security

Winter 2022 - Spring 2023

Member

University of California, Santa Cruz

- Played a key role in Slug Security's success, including a 2nd place finish in MITRE's 2023 Capture the Flag competition and UC Santa Cruz's 3rd place win in the 2022 NSA Codebreaker Challenge.
- Contributed to UCSC's 9th place finish in the 2022 CyberForce Competition as a member of Slug Security, showcasing teamwork and dedication to cybersecurity goals.