

CARSON WEBSTER

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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)/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 TRR/TDA control and telemetry decryption/decommutation 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.
- System administrator for 30 Solaris systems interfacing with TRR/TDAs, ensuring full DISA STIG and cybersecurity compliance, including regular audits, patch management, and system hardening to prevent non-compliance incidents.

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 Ninjas

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

Projects

RustGuard | High-Performance Intrusion Detection System

February 2024

- Developed a high-performance packet capture and analysis system in Rust using the pcap crate, enabling secure and efficient real-time network traffic monitoring.
- Created a user-friendly interface for configuration and monitoring, integrating SvelteKit for the web frontend and Tauri for the native desktop application, ensuring cross-platform usability and ease of deployment.

Technical Skills

Languages: C, Python, Bash, Tcl/TK, Rust, GoLang, SQL, TypeScript, HTML/CSS, Powershell

Developer Tools: Vim, Docker, Git, Ansible, Jira, Real-Time Linux

Current Specilization: Satellite Telemetry Systems (TRR/TDA), C Socket Programming, Telemetry Decryption/Decommutation, Unix Systems, CI/CD Pipelines, 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.