# CARSON WEBSTER

#### carsonwebster.com

## Education

## University of California, Santa Cruz

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

Sep. 2019 – June 2023 Santa Cruz, California

#### Certifications

Secret Level Security Clearance: February 2024

CompTIA Security+: June 2023 - 2026

## Relevant Coursework

• Data Structures

• Algorithms Analysis

• Artificial Intelligence

• Systems Design

• Web Applications

• Database Systems

• Computer Architecture

• Technical Writing

# Experience

## Code Ninjas

February 2019 – January 2020

Lead Tutor
Lead tutor in after school computer science game development program for children aged 7-14.

• Managed day to day store operations with my team.

• Summer camp lead teacher holding programming classes and other STEM activities.

• Developed prototype of a new pathway progress tracker used to notify us if a student beings to fall behind in curriculum.

# City of Chula Vista

November 2017 - January 2019

Lifeguard and Swim Instructor

Chula Vista, California

Chula Vista, California

• Enforced pool safety rules, preformed rescues when required, and other operational tasks.

• Held swim classes with children 4-12 creating a fun, educational, and safe pool classroom environment.

# **Projects**

ResumeWizard.tech | Resume formatting assistant with LaTeX exporting and OpenAI integration

June 2023

- Orchestrated a full stack Sveltekit application allowing users to optionally login with Oauth, create, and store resumes.
- Information is grammar corrected and touched up with OpenAI's GPT API and then neatly exported to a LaTeX formatted resume.
- Node server is sitting on a Linode cloud VPS next to Pocketbase service, both beind Nginx reverse proxy.
- Cruzhacks 2023 hackathon category winner

#### YowerzSecuritySuite | Multi-functional Security Audit Tool

September 2023

- Developing a multifunctional Golang command-line tool, featuring packaged modules for password strength analysis, base64 encoding/decoding, packet logger/spoofer, honeypot, and command + control center.
- Demonstrated versatility and adaptability in software development by creating a modular tool capable of addressing a variety of cybersecurity and penetration testing challenges.
- Contributed to the open source cybersecurity community with an extensible tool that combines useful functionalities.

# RustGuard | High-Performance Intrusion Detection System

Febuary 2024 - Current

- Implemented a robust packet capture and analysis system in Rust using the pcap crate, ensuring efficient and secure network traffic monitoring.
- Developed a seamless and user-friendly interface for configuration and monitoring, utilizing SvelteKit for the web-based frontend and Tauri for the native desktop application.

## Technical Skills

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

Developer Tools: VS Code, NeoVim, Docker, Git, Google Cloud Platform, Amazon Web Services, Linode

Technologies/Frameworks: Linux, GitHub, Jenkins, Jira, React/Next, Svelte/Sveltekit, Metasploit, Burp Suite

## 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.