ELI

SOFTWARE ENGINEER

| 1231 Neptune Dr, San Diego | eliperez0024@gmail.com | LinkedIn | GitHub | Portfolio

SUMMARY

A driven Computer Science student with proven experience developing high-performance, full-stack web applications in rust. Eager to apply a deep understanding of systems programming and a passion for building impactful software.

EDUCATION

Southwestern Community College | Chula Vista, CA

Associates of Science in Computer Science | Expected May 2026

 Data Structures & Algorithms, Object-Oriented Programming, Computer Architecture, Discrete Mathematics

SKILLS

- Back-End & Cloud: Rust (Axum, Shuttle-rs), Python, PostgreSQL, NodeJS
- Front-End: JavaScript, TypeScript, React, HTML/CSS, Leaflet.js,
- Developer Tools & Platforms: Docker, Git, GitHub, AWS (Familiarity), CI/CD (Netlify, Shuttle-rs)

PROJECTS

Until Every Cage is Empty (Open-Source Mapping Application) <u>Live Demo | GitHub Repo</u>

- Engineered a high-performance RESTful API in Rust using the Axum framework to serve over 22,000 data points to a global user base of activists and researchers.
- Developed a dynamic front-end with Vanilla JavaScript and Leaflet.js to create an interactive map visualization, receiving contributions from the open-source community.
- Implemented Python scripts for data cleaning, processing, and standardization to ensure data integrity.

Electron CPU (8-Bit Computer, Assembler, and Emulator) | GitHub Repo

- Designed and built a custom 8-bit CPU from the ground up using logic gates in an electronics simulator, complete with a custom instruction set and custom architecture.
- Developed a corresponding assembler and emulator in Rust, to convert custom assembly language into machine code, demonstrating a deep understanding of low-level systems programming.
- Created a VS Code extension for syntax highlighting to improve the development workflow for the custom assembly language.

PROFESSIONAL EXPERIENCE

Computer Repair Technician, Elite Computers

Aug 2024 - Present

- Systematically diagnosed and resolved complex hardware and software issues for a diverse client base, applying logical troubleshooting methodologies to identify root causes.
- Communicated technical solutions effectively to non-technical clients.

Detailing Professional | Bonita Mobile Detailing (Founder) Website | Google | Sep 2024 - Aug 2025

- Launched and operated a self-started service business, managing the entire client lifecycle from marketing, initial consultation and quoting, to final service delivery.
- Applied meticulous attention to detail during multi-step processes to ensure a flawless, high-quality result for every client.

AWARDS & ACHIEVEMENTS

- AP Computer Science Exam: Passed with highest possible score (5) Self Studied
- Sweetwater District Honors Band: Selected for a highly competitive, audition-only ensemble
 for six consecutive years; earned the title of First Chair Trumpet for two years, leading a
 section of 15+ musicians.