

**Isaac Ericsson | isaac.h.ericsson@gmail.com | (707) 200-3983 | Windsor, CA**

[LinkedIn](#) | [GitHub](#) | [Website](#)

**Objective:**

Computer Science student (May 2027) seeking a software engineering internship or co-op where I can apply my experiences with C, Python, full-stack web development, and systems programming

**Education:**

- California Polytechnic State University - San Luis Obispo - G.P.A. 3.62
  - B.S. in Computer Science - Expected May 2027
- Santa Rosa Junior College (Dual Enrollment) - G.P.A. 3.8
  - Completed Computer Science (C++) and Discrete Mathematics while in high school
- Windsor High School, Windsor, CA - Class Salutatorian
  - Graduated June 2024 - G.P.A 4.0

**Skills:**

**Programming Languages:** C, Python, Java, JavaScript, HTML, CSS, RISC-V Assembly

**Tools:** React, Jest, Azure, REST APIs, Valgrind, Vim, JMP, Excel, AutoCAD

**Software Engineering Practices:** Agile/Scrum, Source control with Git/Github, 88 wpm

**Technical Projects:**

- **Inventory Web App:** Used Agile software processes to work with a team and create a full-stack inventory web app with Express Javascript and React Javascript. Hosted with Azure.
- **Advent of Code:** Completed over 15 Advent of Code challenges in Python using common data structures such as a stack, hashmap, and queue to solve Christmas themed problems.
- **LZW Encoding:** Created C program to compress and decompress text files using the Lempel-Ziv-Welch (LZW) algorithm with a custom dictionary implementation.
- **RISC-V MMIO Exception Handling:** Implemented low-level exception handling through memory-mapped I/O in RISC-V assembly.
- **CSV to ASCII Histogram Converter:** Built a C program to parse and visually represent CSV data as an ASCII histogram.
- **Text File Converter:** Developed a C utility to convert between DOS and UNIX text file formats.
- **Java Virtual World Pathfinder:** Using object oriented techniques in Java, created an A\* pathfinding algorithm for 2D virtual world.
- **Large Number Class in Java:** Implemented a custom linked-list-based class for arbitrarily large number arithmetic.

**Relevant Coursework:**

- Data Structures, Systems Programming, Software Engineering Project Based OO Design, Assembly, Linear Algebra, and Web Development

**Work Experience:**

- Brejle and Race Consulting Engineering - Santa Rosa, CA  
*Engineering Intern* - Summer and Fall 2023
  - Utilized AutoCAD to assist engineers with technical drawings.
  - Attended project meetings and site visits to understand real-world applications
- Healdsburg Swim Center - Healdsburg, CA  
*Lifeguard and Swim instructor* - May 2022 through September 2025
  - Enforced facility rules and responded promptly to emergencies.
  - Taught fundamental swimming skills to children of various ages and skill levels.

**Hobbies:**

- Sailing - I sail FJ boats at the Cal Poly Sailing Club where we compete against other California schools year round.
- Dungeons & Dragons - I enjoy playing the famous table top role playing game with friends and family.