James Contini

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EDUCATION

U.C. Santa Cruz, Baskin College of Engineering, Santa Cruz, CA
Computer Science B.S. - *Computer System Design, Stochastic Analysis, Data Structures and Algorithms in C, Calculus III, GPA: 3.68.*

EXPERIENCE

SlugSat, Santa Cruz, CA - *SmallSat Software Engineer*

SPRING 2023 - PRESENT

- Actively ameliorating our system's last mile network protocol by integrating Cal-Poly's PROVES architecture into the OBC allowing our ground station to take advantage of a more robust telecommunications framework.
- Aspiring towards efficient, fault tolerant code, capable of running smoothly in high-stakes, unforgiving environments.
- Contributing to a 15 page technical proposal for NASA's CLSI describing our mission.

Web Design, San Rafael - Santa Cruz, CA - *Website Developer and Designer*

SPRING 2023 - PRESENT

- Winding up my stylized embedded systems project portfolio, designed on Figma website prototyping tool.
  - Site developed using HTML, JS, CSS and Figma hosted on a Git Pages web server.

Huffman Module, Santa Cruz, CA - *Computer Systems Student*

FALL 2022 - WINTER 2022

- Constructed a Huffman compression ADT framework and lightweight I/O library in C, enabling compression to harness bit-level optimizations and I/O to operate with decreased overhead using a straightforward, system call-based I/O interface.
- Project scored in the 95th percentile in a large technical class (300+ students) and made up 11% of our total grade.

Academy of Engineering and Technology, San Rafael, CA - *Embedded Systems Student*

FALL 2019 - SUMMER 2021

- Four semester-long projects in teams of two, focusing on embedded systems.
- Personally addressed signal noise complications in Heliostat and Autonomous Vehicle systems by devising a sliding window algorithm in C++ to reduce photoresistor noise and improve signal accuracy.

Integration

- ☑ PyCubed SmallSat framework.
- ☑ Fusion360 Suite, PCB circuit design, CNC & manual machinery.

Development Tools

- ☑ C, C++, Bash, Python, UNIX, Git + Github, RISC-V, GNUPlot, GMP Lib, Valgrind.
- ☑ HTML, CSS, Javascript, Google Sheets API, Figma.

Breadth

- ☑ UCSC 100m school record holder.
- ☑ Fluent in English, Spanish, and proficient in French.
- ☑ Musician: guitar, ukulele, and piano.