

## AIDAN COOLEY

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### EDUCATION

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#### Bachelor of Science: Computer Science, 3.78 GPA

University of Utah, Kahlert School of Computing  
Minor in Applied Mathematics

Salt Lake City, UT  
Anticipated December 2026

#### Related Coursework

Algorithms, Computer Systems, Computer Organization, Models of Computation, Real Analysis, Linear Algebra, ODEs

### TECHNICAL SKILLS

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**Programming Languages:** C, VHDL, SystemVerilog, Python, C++, Java, R, C#, SQL, TCL, QT

**Technical Skills:** Github, SQL, Vivado, Embedded Software, Computer Architecture, Computer Engineering

### TECHNICAL PROJECTS

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#### Debugging FPGAs Through a Software Slowdown – Skills used: VHDL, C

May 2025 – Aug 2025

- Developed a test suite for a broken Spacewire Router on an FPGA for satellites
- Fully customizable data packets, router paths, and speeds
- Comprehensive error checking through log files and print to terminal
- User friendly shell allowed for engineers to communicate with the router, without having to understand low level hardware involved

#### Spacewire on the Raspberry Pi Pico – Skills used: C, microprocessor assembly

May 2024 – Aug 2024

- Implemented a system to simulate behavior of spacewire on a \$4 microprocessor
- Utilize every piece of microprocessor to run a very complex data transfer protocol
- Showcases lowest bound of needed hardware to implement complex and expensive communication protocol
- Potential to save money through debugging and testing on cheaper devices, allowing engineers to save the space-grade hardware for the final flight unit

#### Accessing ML Models' Carbon Footprint on an FPGA – Skills used: HPC, Verilog, Pytorch

Sep 2025 – Present

- Comparing neural network tradeoffs between efficiency, accuracy and sustainability
- Implementing designs on an FPGA to harness reconfigurability
- Working with HPC architecture to schedule jobs

### EXPERIENCE

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#### Los Alamos National Lab

Los Alamos, NM

CAI-3 Intern

May 2024 – Aug 2025

- Worked on low level computer engineering for space missions
- Helped with various radio testing campaigns for flight units
- Work on a large team of engineers for product close to launch day
- Primarily working on microcontrollers and FPGAs in C or VHDL

#### Wasatch Magazine

Salt Lake City, UT

Editor-in-Chief

May 2025 – Present

- Run a team of more than a dozen contributors in various positions; writers, photographers, illustrators, designers
- Oversee the entire lifecycle of content from pitch to publish. Creating both a traditional print magazine, as well as online/social media content
- Edit all the content written for the magazine
- Work alongside professionals in the industry on advertising, printing, distribution, and collaboration
- Alongside all my leadership rolls, I still write, take photos, and make videos for our publication
- Working with HPC architecture to schedule jobs

### VOLUNTEER WORK

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#### Utah Climbing Team

Salt Lake City, UT

Outdoor Trip Manager

August 2023 – Present

- Plan and led all the outdoor trips for the climbing team
- Teach outdoor climbing technique and safety