

Seth Ricks

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EDUCATION

Bachelor's in Electrical Engineering

Brigham Young University - Idaho

Anticipated: December 2026

- Overall GPA: 4.0
- Scholarships: Brigham Young University-Idaho Academic Grant

CERTIFICATIONS

- Certified SolidWorks Associate (CSWA-2025)

RELEVANT WORK EXPERIENCE

Research Assistant

May 2025 - July 2025

FRoSt LAB

- Built a PyQt and ROS-based GUI to monitor autonomous underwater vehicles, supporting a 10-person team during multiple field tests
- Presented GUI updates to lab, team, and campus groups; authored a 26-page GitBook documenting project
- Collaborated with team members and reported progress to team leader after weekly meetings, ensuring task completion and smooth project workflow

Drafting Assistant

January 2025 - April 2025

Engineered Systems Associates

- Utilized AutoCAD and BlueBeam to design 5 engineering documents on average per week
- Excelled in high-pressure environments to deliver quality work under tight weekly deadlines
- Maintained productivity during slow periods by averaging 3 hours of AutoCAD training daily, reducing task completion time in peak workloads

Circuit Analysis Teaching Assistant

August 2024 - December 2024

Brigham Young University - Idaho

- Guided 30 students through Ohm's Law and Kirchhoff's Laws, Thevenin equivalents, Nodal and Mesh Analysis, and other circuit analysis principles
- Monitored 15 pairs of students during lab work, offering constructive feedback and addressing challenging questions when desired
- Collaborated with another TA and professor to coordinate completion of 12 student projects, ensuring grading within a 1-week turnaround

PROJECTS

Autonomous Chess Board

February 2024 - March 2025

- Designed and printed over 20 3D models using SolidWorks, for creation of necessary moving parts of chess board
- Wrote and demonstrated code for STM32 microprocessor to control and receive input from 7 peripheral devices
- Drafted a full report with LaTex, including test plans and results, schematics, and specifications of project

Virtual Microprocessor Design

January 2024 - April 2024

- Applied Logisim to design and present a 4-bit microprocessor, resulting in a 8-function computing unit
- Organized regular brainstorming sessions and design reviews with 2 students, fostering a collaborative environment conducive to innovation and problem-solving
- Cultivated a culture of openness and cooperation, enabling effective knowledge sharing and problem-solving among 2 students

SKILLS

Programming Languages: Python, C#, C, ARM assembly, LaTex, System Verilog (in order of proficiency)

Software/IDEs: ROS, SolidWorks, AutoCAD, LTSpice, Logisim, Raspberry Pi, STM32Cube, Arduino

Hardware Skills: Soldering, Debugging, Troubleshooting, Testing, Circuit Analysis / Design

English (Native), Spanish (Intermediate)