

EDUCATION

Colorado School of Mines , Golden CO	Dec 2027
Bachelor of Science Electrical Engineering	GPA: 3.66
Front Range Community College , Fort Collins, CO	May 2024
Associate of Science	GPA 3.89

TECHNICAL SKILLS

- **Languages:** Python, C/C++, MATLAB.
- **Design Tools:** SolidWorks (CSWA Certified), EasyEDA.
- **Technologies:** Microcontrollers, Magnetometer, PIDs, Oscilloscopes, Multimeters, Soldering.
- **Professional:** Self-motivation, self-teaching, technical project management, safety awareness.
- **Certifications:** OSHA 10 (2022), Adult First Aid/CPR/AED (2024).

PERSONAL PROJECTS

Design and build of digital Minecraft Compass , Fort Collins, CO	Summer 2025
• Designed custom PCBA schematic and layout integrating ESP32-C3 microcontroller and QMC5883L magnetometer achieving accurate directional display. • Developed Arduino-based firmware with battery monitoring, calibration routines, and dynamic LED rendering. • Designed enclosure in SolidWorks and 3D printed; implemented compact, panel-mounted installation.	
Retrofit of Electric Ceramics Kiln , Fort Collins, CO	Summer 2024
• Designed new heating elements increasing maximum firing temperature from 1700°F to 2300°F. • Integrated ventilation and 120/240 VAC utilities, ensuring safe and efficient power distribution. • Automated firing schedules with PID controller using Raspberry Pi, thermocouple, and open-source code for precise temperature control and remote monitoring.	
Design of Custom Car Audio System , Fort Collins, CO	Summer 2023
• installed upgraded wiring, speakers, subwoofers, and amplifier audio system. • Used oscilloscope and audio analyzer to optimize performance and prevent signal clipping. • Designed and implemented 8-channel audio relay switch and enclosure, enabling multifunctional use of existing amplifier and audio source with custom power routing.	

LEADERSHIP & EXPERIENCE

Open-Side Flanker Colorado School of Mines Rugby , Golden, CO	Fall 2024 — Present
• VP of risk (2025-present); mitigated injury risks by ensuring preventative/safety equipment availability for practices, games, and travel. • Starting open-side flanker for 2025 NCR D3 15s season making it to the elite eight. • Placed 4th at nationals for 2024 NCR D3 15s season.	
Front Desk Assistant Arthur Lakes Library , Golden, CO	Fall 2025 — Present
• Facilitate access to academic resources for students and faculty, managing circulation and resolving user inquiries regarding library systems. • Execute critical collection maintenance projects, including extensive rebarcoding, ensuring inventory accuracy and database integrity.	
Chapter Archivist Beta Theta Pi Fraternity , Golden, CO	Spring 2025 — Fall 2025
• Managed chapter study room operations and budget allocation. • Implemented study monitors to enhance productivity for members.	
Mover Billy Goat Moving Company , Fort Collins, CO	Summers 2022 — 2025
• Crew lead (Summers 2024-2025); safely transported goods, communicated with customers, trained hires, and resolved on-site issues.	