

# Rugby Taylor

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## EDUCATION

### Brigham Young University, Ira A. Fulton College of Engineering

Apr 2027

Bachelor of Science, Electrical Engineering

- GPA: 3.0
- Embedded systems and IoT development (hardware and software)
- Power electronics, renewable energy systems exploration, and practical applications

## SKILLS

- Software knowledge: C/C++, Python, MATLAB, development on microcontroller and IoT platforms
- Hardware and prototyping: Arduino, ESP-IDF, Raspberry Pi (3, 4, Zero W, Pico), PCBs, KiCad
- 3D CAD modeling: Fusion 360, SolidWorks
- Hands-on fabrication: soldering, welding, custom hardware assembly, woodworking, and milling

## RELEVANT EXPERIENCE

### RESCUE POWER

Feb 2025 - Present

*Part-time Field Engineer*

- Enhanced reliability of offshore 20KVA battery backup systems in worldwide oil rigs, reducing downtime and ensuring continuous power availability for critical safety operations
- Installation and refurbishment of large-scale (60KVA – 120KVA) battery backup UPS systems on military installations globally, mechanical and electrical refurbishment, and replacing/upgrading 58+ battery packs per system to extend operational lifespan
- Maintenance of power filtering and battery backup for light rail in CA Bay area (BART)

## PROJECTS

*Smart Blinds Automation System*

Mar 2025 - Aug 2025

- Developed a fully autonomous blinds system, programming custom C firmware on Raspberry Pi and ESP32; debugged, 3D-modeled, and fabricated a 3D-printed system housing

*IoT Smart Doorbell Camera with LCD Interface*

Jan 2025 - Apr 2025

- Constructed a Raspberry Pi doorbell system with LCD display and camera, programming a concurrent GUI to manage file access and upload captured images to a server

*Battery System Development*

Aug 2023 - Dec 2023

- Devised battery system for electric skateboards integrating circuitry and battery cells to enhance performance, reliability, and safety

*Competitive Robotics and Automation Club*

Sep 2021 - Apr 2022

- Led a team in designing and building an autonomous robot with real-time object detection to retrieve targets; earned 2nd place in the Mount West Robotics Competition

## ADDITIONAL EXPERIENCE

- Founded a furniture business crafting custom metal, wood and epoxy resin tables, managed design, fabrication, sales, and business operations
- Led volunteers in community outreach and service initiatives during a two-year program. Proposed and implemented a new system, boosting productivity across the program by 50%
- Provided individualized and group swim instruction for 8 years, enhancing leadership and teaching abilities
- Gained experience in financial analysis, market trends, and investment evaluation