TAYLOR ROMAIN

EDUCATION

Valencia College Expected Apr 2028

Bachelor of Science in Electrical Engineering Technology

TECHNICAL SKILLS

Programming: Java, Python, C
Software: LabVIEW, AutoCad, PSpice, MATLAB, NI Multisim, Microsoft 365, Git, LaTex, Eclipse
Certifications/Clearances: EMT-B, Active Secret Clearance

WORK EXPERIENCE

Unusual Machines
Orlando, FL
Headset Assembler May 2026 - Present

- Assembled, integrated, and validated electronic FPV headset systems in accordance with engineering drawings, technical work instructions, and quality assurance standards
- Supported production logistics by managing component flow, maintaining inventory accuracy, organizing workstations, and ensuring materials were available to meet manufacturing schedules
- Conducted functional testing, defect analysis, and process verification while collaborating with engineering and production teams to improve product quality, manufacturing efficiency, and throughput

United States Army Reserves
345th Field Hospital, Naval Air Station, Jacksonville, FL
Combat Medical Specialist Mar 2025 - Present

- Delivered Tactical Combat Casualty Care (TCCC) in austere, high-pressure environments, perform rapid trauma assessment, triage, and lifesaving interventions
- Performed advanced patient care skills including vital signs monitoring, IV/IO access, airway management, hemorrhage control, and basic medication administration
- Applied sterile technique, preventative medicine practices, and accurate medical documentation using DD Form 1380 to ensure continuity of care and patient tracking
- Demonstrated effective team communication, leadership, and rapid decision-making during simulated emergency combat medical scenarios

Siemens Energy Innovation Center by Viable Engineering Solutions
Orlando, FL
Automation Engineering Intern (Co-Op) Aug 2023 - Feb 2024

- Supported cross functional engineering teams in completing tasks related to electrical panel assembly.
- Drafted electrical panel layouts and schematics, ensuring accurate placement of components and compliance with design specifications
- Performed precise mechanical work, including circle cutting, jigsaw cutting, and drilling, to prepare panels for components installation
- Conducted quality checks on assembled panels to verify proper wiring, alignment, and functionality before delivery

PROJECT HIGHLIGHTS

Demo Inertial Electrostatic Confinement Nuclear Fusor Jan 2023 – Dec 2024

- Conducted experiments to achieve detectable D-D nuclear fusion reactions, utilizing the Farnsworth-Hirsch Nuclear Fusor design and verifying results through neutron bubble dosimetry
- Engineered and maintained a high-vacuum system, including vacuum pumps, flanges, seals, and gauges, achieving and sustaining low-pressure environments necessary for fusion
- Designed and assembled a functional nuclear fusor system, utilizing a high-voltage X-ray transformer to generate the negative DC voltage required for ion acceleration and confinement.
- Conducted precision assembly and calibration of mechanical and electrical components, including phase alignment of transformer secondaries to maximize power efficiency
- Integrated custom-built electrical control panels to manage power delivery, monitor performance, and ensure operational safety for high-voltage systems

Electrical Control Box Jan 2024 – Dec 2025

- Built a high-voltage control box with LED power indicators, relay-controlled 120V outlets, and an emergency stop for enhanced safety and functionality
- Equipped the system with a 120V male inlet, dual power supplies, and terminal blocks for streamlined power and data distribution
- Configured Ethernet ports for vacuum gauge monitoring and control, enabling efficient data and power management
- Included circuit breakers for overload protection and relays to manage vacuum pump operation reliably
- Utilized precision drilling, jigsaw cutting, threading, and tapping techniques to prepare and mount components accurately within the enclosure

EXTRACURRICULAR ACTIVITIES

Volunteer

Siemens Energy STEM@SE, UCF Engineering Department, Advent Health Emergency Room, US Army

REFERENCES

Available upon request