

### **EDUCATION**

## **Rochester Institute of Technology** | B.S. in Computer Engineering

August 2018 - May 2023

#### **EXPERIENCE**

# **Amazon Web Services (AWS)** | Quantum Computing Technical Writer

May 2022 - Present

- · Authored and maintained AWS Braket Developer Guide and API Reference documentation using XML and Git
- Collaborated with Braket engineers to enhance technical documentation for seamless customer experiences
- Validated and tested Braket example code to ensure functionality and quality before deployment
- Developed a **Python** script leveraging the **Pypandoc API** to automate file format conversions

### **Poseidon Systems** | Product Development Engineer

Jan 2023 - May 2023

- Contributed to the redesign and development of the AP2200 Industrial Data Logger
- Conducted detailed research on feature improvements and design optimizations for enhanced product performance
- Designed **Printed Circuit Boards (PCBs)** using **EAGLE**, and validated circuit prototypes with **LTSPICE** simulations

### Bryx Inc. | Full-Stack Embedded Systems Engineer

September 2021 - May 2022

- Designed, prototyped, and tested PCBs using KiCAD and validated designs with LTSPICE
- Performed through-hole soldering (THT) for board assembly and rework
- Used **breadboards** for hardware prototyping, concept validation, and debugging electrical systems
- Operated and maintained **3D printers** while creating mechanical **CAD** designs for various projects
- Developed **Arduino** and **Python** scripts to interface and test hardware components
- · Collaborated with third-party vendors on hardware product development and component sourcing

# **Abbott** | Software Engineer

July 2020 - December 2020

- Built a backend application to store and analyze data using Python and the Pandas API library
- · Designed a system to process and organize data from CSV files for improved user accessibility

### **PROJECTS**

### **NASA** | Gamification and Monitoring of Sensorimotor Training https://github.com/MSD-RIT-NASA

August 2022 - May 2023

- Developed a multidisciplinary solution for NASA to train and monitor astronauts' balance and sensorimotor capabilities
- · Documented and validated electrical components, including Tolomatic actuators, sensors, and kill switch circuits
- Programmed an **Arduino** to interface with S-Type load cells, calibrate data, and communicate results for VR integration
- · Created a **Python** script to process balance scores and log raw data for **MATLAB** analysis and plotting
- · Designed and validated functionality of custom PCBs in KiCAD for attachable accelerometers
- Built a Python server to integrate sensors, actuators, kill switch, and connect to the Unity VR systems in C# for seamless
  operation

### SKILLS

- Programming languages: Python, XML, C, Arduino C/C++, C#, LaTeX
- · Software tools: KiCAD, EAGLE, PSPICE / LTSPICE, VSCode, Raspbian, Vim, RedHat, Ubuntu
- Hardware proficiencies: Arduino, Raspberry Pi, STM32L476xx, Breadboarding, Oscilloscopes, Digital Multimeter, Waveform Generator

### **CERTIFICATIONS**

### **AWS Knowledge** | Amazon Braket Badge

September 2024

· Demonstrated proficiency in quantum computing concepts, with a focus on Amazon Braket tools and workflows