ALICIA HYLAND

56 Old Orchard St, Williamsville, NY 14221 716-430-8825 aliciahy@buffalo.edu

EXPERIENCE

ELECTRICAL ENGINEERING INTERN - X-RAY OPTICAL SYSTEMS, EAST GREENBUSH, NY

May 2023 - Present (November 2023)

- Designed and built three functional test fixtures for use in testing custom microcontroller boards, saving thousands of dollars by eliminating malfunctioning boards during assembly
- Test program runs as a web app in Python with Flask framework and tests the board's IO and peripherals
- Schematic capture and layout PCB adapter boards in OrCAD to simplify test fixture setup
- Assembled test fixtures, including cable assembly and soldering parts
- Wrote GPIO, UART, I2C, and SPI drivers for a new custom microcontroller board based on an ARM M4 Cortex processor. Followed standards for reusable and testable embedded code.

PROGRAMMER/ANALYST I - ROSWELL PARK COMPREHENSIVE CANCER CENTER, BUFFALO, NY

September 2019 - April 2023

- Full-stack development using C#, VB.NET, .NET framework and SQL Server for the New York State Smokers' Quitline
- Gathered and analyzed customer requirements in order to design and implement call center software
- Designed, developed, and provided ongoing support for an innovative automated cognitive-behavioral texting program with web registration that serves over 2,000 NYS residents in their efforts to quit tobacco
- Designed software to handle inventory and shipping of products
- Built RDLC reports and assisted in data analysis to deliver data collected from our software to public health researchers
- Ensured the quality and reliability of our software through thorough testing, deployment, and maintenance efforts, and provided exceptional support to users

EDUCATION

UNIVERSITY AT BUFFALO - M.S. IN ELECTRICAL ENGINEERING - GPA 3.5

August 2022 - December 2023

STONY BROOK UNIVERSITY - B.S. IN MATHEMATICS - GPA 3.1

Minors in Computer Science and German

2015 - 2019

SKILLS

C, Python, Javascript, Java, HTML/CSS, SQL, BASH scripting, Linux, UART, I2C, JTAG, USB 2.0/3.0, OrCAD, MATLAB/Simulink, ARM GNU toolchain, RTOS