## Angela **Hudak**

A Computer Engineering student seeking an internship for Summer 2022

**EDUCATION** 

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

August 2018 - May 2023

**EXPERIENCE** 

**Bryx Inc.** Full-Stack Embedded Engineering Intern

September 2021 - May 2022

- · Hardware / PCB design
- Hole soldering and board re-work
- · Electrical debugging and related lab work
- Buildup prototypes on a breadboard for quick concept validation
- · Various projects using mechanical CAD and using / maintaining 3D printers
- · Wrote basic Arduino code to interface with hardware

## **Abbott POC** | Project Support Engineering Intern

July 2020 - December 2020

- Worked in a remote setting with a Software Engineering Team.
- Designed and developed the backend that would allow the user to store and analyze data using Python and the Pandas library.
- The application was able to receive data from a csv file and would automate the organization of it so it could be easily viewed by the user.
- Learned C++ to develop smaller applications which could potentially be used in upcoming projects.

**PROJECTS** 

MIPS Project VHDL

January 2021 - May 2021

- This project was completed over the course of my Digital System Design 2 class.
- Used Xilinx Vivado to create the functional parts of a MIPS Processor.
- The parts that were included in the processor were ALU, Register File, Instruction Fetch, Decode, Execute, Memory, and Writeback Stages.
- The processor was able to receive different MIPS assembly instructions and execute those commands.

## **Bomber Game** 6502 Assembly, Vim, Ubuntu

**April 2020** 

- github.com/angelahudak/Bomber
  A game developed for the Atari 2600 using the 6502 Assembly architecture.
  - Learned how to create sprites and digits on playing field using assembly commands.
  - The game contains a multitude of features such as a play field, scoreboard, missiles, two players on the screen at a time, warp border to the left and right, and background sound.

SKILLS

- Languages: Python, C, VHDL, Arduino C/C++, C++, ARM / MIPS Assembly, MATLAB, LATEX
- Software: KiCAD, Keil µVision, PSPICE / LTSPICE, Xilinx Vivado, Pycharm, Raspbian, Microsoft Office, Vim, RedHat, Ubuntu
- Hardware: Arduino, Raspberry pi, MSP432p401r, Basys3, FRDM-KL46Z Board, Oscilloscopes, Breadboard / Circuitry, Digital Multi-meter, Waveform Generator

EXTRACURRICULARS

**Computer Science House** House Improvements Director, 3D Admin August 2018 - January 2022 csh.rit.edu

- Computer Science House is a living and learning community with a helpful environment that emphasizes hands-on learning and projects outside of the classroom.
- The House Improvements director delegates projects that improve the physical aspects of floor, such as painting, cleaning, building, and organizing House's resources.
- A 3D Print Administrator assists and educates other members on how to print 3D files effectively and taking care of 3D printers.

## RIT Space Exploration Club (SPEX) | Member

January 2019 - December 2019

spex.rit.edu

Worked with other members on the rover electronics team by building a working prototype rover in preparation for the University Rover Challenge.