# Angela Hudak

A Computer Engineering student seeking an internship for Fall 2021.

**EDUCATION** 

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

August 2018 - May 2023

#### **EXPERIENCE**

## **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.

## **SPEX Rover Project** | Electronics Team Member

January 2019 - April 2019

spex.rit.edu/projects

- The Rover is a team project that is a part of the SPEX Club.
- My responsibility was to connect the raspberry pi 3B+ to an xbox one controller through blue tooth and enable it so it stayed connected even when shut off.
- Also taught others how to solder properly and safely.

#### SKILLS

- Languages: VHDL, Python, C++, ARM Assembly, MIPS Assembly, 6502 Assembly, Java, MATLAB, LATEX
- Software: Xilinx Vivado, PSPICE / LTSPICE, Pycharm, IntelliJ, Keil  $\mu$ Vision, Raspbian, Quartus II, ModelSim, Microsoft Office, Vim, Ubuntu
- **Hardware:** Basys3, FRDM-KL46Z Board, Oscilloscopes, Breadboard / Circuitry, Digital Multi-meter, Waveform Generator, Raspberry pi, Arduino

## EXTRACURRICULARS

**Computer Science House** House Improvements Director, 3D Administrator August 2018 – Present 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.