Adam Neulight

A Computer Engineering student seeking an internship for Fall 2021.

EDUCATION

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

August 2019 - May 2024

EXPERIENCE

Home Depot | Customer Service Associate

June 2020 - August 2021

- Worked closely with managers and other associates to ensure customer service is being maintained and that customers issues are being solved.
- Maintained a working knowledge of most products in the store and their locations.

PROJECTS

3D Printer Mods and Improvements | Marlin Firmware, CAD Design

July 2019 - Present

- Designed and implemented a case for an SKR 1.4 mainboard and an LCD screen. The case is made to be detached from the printer but still wired by a tether connected to the printer via DIN terminals.
- Implemented a direct drive extruder with an attached BLTouch bed leveling sensor along with a custom designed fan shroud for it.
- Upgraded to dual Z motors in order to fix X gantry sag due to the heavier extruder assembly.

Tethered Underwater ROV | CAD Design, Python, 3D Printing

February - April 2019

- Worked as part of a two man team in order to develop a final project for an engineering class in High School.
- The ROV consisted of three brushless thrusters in order to control direction and altitude.
- Contained within the robot is a 4 axis motion controlled gimbal with an attached camera and a live feed streamed back to the operator on the surface.
- The tethering was completed using a waterproof armored ethernet cable using simple internet communications protocols between the raspberry pi on the ROV and the surface all programmed using Python.

200 LED Sign | Soldering, Electronics, C++

January 2018

- Designed a 200 LED sign using off the shelf 3mm LED's, Perfboard, two 9 volt batteries, Maxim 7219 IC's, and an ATiny 85 microprocessor.
- The sign was constructed using three large perfboard pieces with the led's spelling the name of my high school engineering teacher.
- Each board was connected using a DIY pin header connector which transferred power and data to the LED drivers. This was all driven with an ATtiny 85 microprocessor running C++ arduino code.

SKILLS

- · Languages: VHDL, Python, Java, C++, ARM Assembly, MIPS Assembly, MATLAB
- **Software:** Xilinx Vivado, LTSPICE, Pycharm, IntelliJ, Keil μ Vision, Raspbian, Quartus II, ModelSim, Microsoft Office, Vim, Ubuntu
- **Hardware:** FRDM-KL05Z Board, Oscilloscopes, Breadboard / Circuitry, Digital Multi-meter, Waveform Generator, Raspberry pi, Arduino

EXTRACURRICULARS

Computer Science House | 3D Administrator

August 2019 - 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.
- A 3D Print Administrator assists and educates other members on how to print 3D files effectively and taking care of 3D printers.

Technology Student Association | Member

December 2018 - March 2019

• Worked with a team of other young engineers to complete multiple engineering and technology related projects to compete against other teams in the state.