

OBJECTIVE

To further develop computer engineering skills and gain professional experience by working in a co-op position in the summer of 2021 from May to August.

EDUCATION

Rochester Institute of Technology

Rochester, NY

Bachelor of Science in Computer Engineering

Expected Graduation: May 2022

- **GPA:** 3.71

- **Courses:**

Digital System Design I, II
Intro to Embedded Systems

Computer Science I, II
Computer Architecture

Digital Signal Processing
Applied Programming in C

TECHNICAL SKILLS

Languages: C, Python, ARM Assembly, VHDL, C#, Java, Visual Basic, Small

Software: Keil, Xilinx Vivado, Altium, LTSPICE, MATLAB, Linux, Vim

Hardware: FPGA, Raspberry Pi, ARM Cortex M0, Teensy, Oscilloscope, Digital Multimeter, Signal Generator, Spectrum Analyzer, VNA/PNA, Solder Iron

EXPERIENCE

Saab Defense and Security

Syracuse, NY

Electrical Engineer Intern

May 2019 - Dec 2019

- Verified VHDL modules by generating files of known good inputs and outputs with Python, then writing a VHDL testbench to simulate the module with the test data
- Removed uncertainties in board redesign by creating and running test processes on potential components
- Reduced test times by automatically generating mixer intermodulation tables through instrumentation of test equipment with Python and the NI VISA API

Schlosser Steel Inc.

Hatfield, PA

Computer Technician Intern

May 2017 - Aug 2018

- Greatly reduced the time required for accounting to record work hours by automating the timesheet logging system
- Augmented Revit CAD design through plugins and complex element models
- Improved sales estimates by writing a program that generated shop fabrication statistics

PROJECTS

RIT Formula SAE

- Designed a PCB for use in a custom battery management system on the electric car
- Made wireless telemetry possible through an Xbee network transmitting serial messages to a Raspberry Pi running an internet access point with a webserver
- Designed the dashboard PCB to hold a teensy microcontroller that managed a TFT screen driver

Boosted Android

- Enabled wireless and USB gadget drivers by pulling LineageOS 16.1 source tree and modifying kernel code
- Ported Hijacker source code to work with custom driver access
- Added custom functionality to apps by reverse engineering compiled apks without source code

MIPS Processor Model

- Designed the instruction fetch, instruction decode, execute, memory access, and write back stages of the MIPS processor in VHDL

