

Seeking Full Time Employment in Embedded Systems development starting May 2022.

## Work Experience

### Herrick Technology Laboratories: DSP Engineering Intern

I currently work at Herrick Tech Labs developing DSP control systems for high frequency (HF) radio technology using FPGA's. I primarily work with Altera FPGA SoCs (System on a Chip).

### D3 Engineering: Software Engineer

Software Engineering technician at D3 Engineering, where I primarily worked with Embedded Linux and C development on Texas Instruments' TDA line of processors, for automotive vision applications. I managed the team for the development and execution of testing for the latest product. While working at D3, I was exposed to embedded software development on a large code base. I worked on both embedded Linux development, and embedded BIOS development on remote cores of a processor. I was able to hone and expand my skills in working as part of a development team. Demonstrated ability to efficiently work from home, due to COVID-19 Pandemic

### iD Tech Camps: Lead Instructor

*iD Tech Camps: William and Mary, PayPal Timonium, and American University*

Taught a variety of camps during two years at iD Tech camps. In addition to teaching, my second year I was promoted to Lead Instructor. As Lead, I was in charge of the other instructors, and responsible for parent interaction if need be, and administering medicine to students. This position gave me valuable experience in team/personnel management.

**Germantown, MD**  
February '21-Present

**Rochester, NY**  
January --- July '20

**Multiple Locations**  
June-August '18, '19

## Education

### Rochester Institute of Technology

Bachelor of Science: Computer Engineering, 5 year program

GPA: 3.04 - Dean's List Spring '19, Fall '20

Relevant Coursework:

- [Reconfigurable Computing \(CMPE-660\)](#): Made complex synchronous designs on Nexys 4 DDR FPGA board. In Progress.
- [Interfacing Digital Electronics \(CMPE-460\)](#): Used FRDM-K64 ARM board to interface with peripherals, to eventually build and program an autonomous race car. In Progress.

**Rochester, NY**  
Expected May '22

## Skills

- **Languages:** C, VHDL, Arm Assembly, Python,  $\LaTeX$ , Bash, C++, Qt5, Java, Rust
- **Tools:** GNU/Linux tools and environment, Xilinx Vivado, Git, KiCad, Altera Quartus II, ModelSim
- **Hardware:** Soldering, Prototyping on breadboard, Hardware design on FPGA, Hardware Debugging
- **Professional Skills:** Public Speaking, Spanish (Semi Conversational), Team Management

## Projects

### Small Scale Autonomous Race Car

Using a NXP/Freescale FRDM-K64 Embedded Development board, myself and a partner assembled and programmed an autonomous race car to compete in RIT's IDE Cup. Used embedded C to design to interface with a line scan camera to control motors and servos to quickly traverse a randomly designed track.

### Pipelined MIPS Processor

Created each stage of a MIPS processor, individually tested these stages. The processor was modeled and tested using VHDL and then implemented on to Basys 3 FPGA. The processor was tested by calculating 10 elements of the Fibonacci Sequence.

**Embedded C**  
August-December '20

**VHDL**  
January-May '19

## Organizations

- **Engineering House:** Special Interest House at RIT. Positions Held: Secretary. Active October '17 - May '19
- **Computer Science House:** Special Interest House at RIT. Active August '17 - May '18