Seth Gower

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

Work Experience

Herrick Technology Laboratories: DSP Engineering Intern
Germantown, MD
February '21-Present

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
Rochester, NY
January --- July '20

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
Multiple Locations
June-August '18, '19

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.

Education

Rochester Institute of Technology
Rochester, NY
Expected May '22

Bachelor of Science: Computer Engineering, 5 year program
GPA: 3.11 - 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.

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
Embedded C
August-December '20

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
VHDL
January-May '19

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.

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