MICHAEL GREER

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github.com/michaelryangreer

Education

Bachelor's of Science in Computer Engineering
Washington University in St. Louis   **Graduated May 2019**

Computer Engineering Major   Final GPA: 3.57

Robotics Engineering Minor

PhD Student in Electrical Engineering
Colorado State University   **Graduating May 2023**

Electrical Engineering Major   Current GPA: 3.70

Advisor: Dr. Anthony Maciejewski

Technical Skills

Programming Languages:	Java, Python, Matlab, C, C++, x86 Assembly
Software:	Subversion, Git, Autodesk, FreeCAD, Unix, Tensorflow, ROS, Gazebo Simulator
Hardware:	GCode, AVR and ARM Microcontrollers, VHDL/Verilog FPGA Design, SystemC, PCB Design (EAGLE CAD/KiCAD), SMT hand soldering

Experience

MIT Lincoln Laboratory

Product Development Intern | June 2018-August 2018, June 2019-August 2019

- Worked at MIT Lincoln Laboratory in Lexington, MA.
- Interfaced a Zynq Ultrascale + microcontroller with an ADC in order to monitor gain levels.
- Influenced overall system design with insights from ADC technical documents.
- Performed research on applications of Ternary Neural Networks.
- Wrote code to procedurally generate Ternary Neural Network code for use in constrained processors.
- Ternary Neural Network paper pending

AT&T

Product Development Intern | May 2017-August 2017

- Worked at the AT&T Internet of Things Foundry in Plano, TX.
- Validated hardware and firmware using strict standards.
- Created generalized software endpoints for IoT asset tracking solutions.
- Researched the new Lightweight M2M protocol standard compared to existing solutions.
- Implemented Firmware Over the Air system for cooler tracking devices.

Washinton University CSE Department

Head Teaching Assistant | August 2018-May 2018

- Assisted instruction of students under Dr. William Richard.

- Helped students learn the fundamental principles of digital logic, computer architecture, and VHDL.
- Held review sessions to help students prepare for exams.

EA Young Academy

Instructor | August 2013-August 2016, Seasonal

- Taught students week-long classes in 3D Printing, Electronics, Python, and other tech skills.
- Collaborated with other teachers to create comprehensive lesson plans.

All About Circuits – Technology News Publication

Contributing Writer | April 2016-November 2016

- Researched and wrote articles about 3D printing and microcontrollers.
- Worked with strict deadlines and a stringent editing process.
- Author page: www.allaboutcircuits.com/author/michael-greer

Formula SAE Automotive Design Team

Electronics System Team Member | August 2015-May 2017

Electronics System Lead | May 2017-Present

- Designed, prepared, and installed wire harness.
- Created custom dashboard using shift registers and ATMega 328P chipset.
- Interfaced with CAN bus to retrieve data.

Institute for Electrical and Electronic Engineers

Vice President | May 2016-May 2017

Treasurer | May 2017-Present

- Managed new members and new member projects including a battlebots league.
- Led design and construction of an LED dance floor.

Relevant Coursework

Systems Software	Digital Logic	Electrical and Electronic Circuits
Signals and Systems	Web Development	Data Structures and Algorithms
Operating Systems	Dynamics	Object Oriented Programming
Computer Architecture	Control Systems	Digital Systems Laboratory
Computational Geometry	Systems Security	Integrated Circuit Design
Computer Systems Design	Robotics Lab	Robotics Dynamics and Control
Embedded System Design	Robotics Simulation	Digital Signal Processing
Mechanics of Robotics	Image Processing	Digital Control Systems