Tyler Alterio

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Education

University of Massachusetts Lowell - Anticipated Graduation August 2016
B.S. Electrical Engineering and B.S. Computer Science *GPA:* 3.491 • *Dean's List All Semesters*

Professional Work Experience

University of Massachusetts • Lowell, MA **January 2016 to Present**
Computing 2 Grader

- Tutored students in computer science fundamentals and data structures.

University of Massachusetts • Lowell, MA **August 2015 to December 2015**
Research Assistant

- Experimented with P4, an open-source domain-specific network description language.
- Develop method to compile P4 behavioral model into CUDA implementation.

Philips Color Kinetics • Burlington, MA **June 2014 to January 2015**
Firmware Engineer Co-Op

- Practical use of Git version control and tools. In addition to Github management.
- Implemented new features in firmware of PIC based devices with MPLAB IDE.
- Created command-line utility in Qt framework to interface with fixtures via UDP.
- Worked with team of 8 software engineers, utilizing Agile Scrum workflow.

Skills

Languages

- *Systems:* C, C++
- *Object-Oriented:* Java
- *Scripting:* Python, Perl
- *Shell:* Bash, PowerShell
- *Functional:* Clojure
- *Numerical:* MATLAB

Software and Tools

- *Operating Systems:* Windows (up to 10), Linux (Debian-based)
- *IDEs:* Visual Studio, Qt Creator, IntelliJ, PyCharm
- *Version Control:* Git
- *Virtualization:* Oracle VirtualBox, VMWare Workstation, Docker
- *Hardware:* Arduino, Raspberry Pi
- *Lab Equipment:* Oscilloscope, Multimeter, Soldering Iron

Relevant Course Work

- Intro to Engineering 2: MATLAB application and use of BASIC STAMP microcontrollers.
- Computing 4: Adoption of OpenCV computer vision library and Qt libraries for C++.
- Microprocessor System Design: Program design in x86 and PIC assembly.