# 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: 3.47 • Dean's List All Semesters

# Professional Work Experience

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

• Tutored students in computer science fundamentals and data structures.

## University of Massachusetts • Lowell, MA Research Assistant

August 2015 to December 2015

- 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 Firmware Engineer Co-Op

June 2014 to January 2015

- 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.