

# TYLER ALTERIO

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## Education

University of Massachusetts Lowell - Summer 2016

B.S. Electrical Engineering and B.S. Computer Science GPA: 3.486 • *Dean's List All Semesters*

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## Professional Work Experience

Plexxi, Inc. • Nashua, NH  
Software Engineer

June 2016 to Present

- Implemented Bidirectional Forwarding Detection protocol in Erlang for agile networking.
- Refactoring of legacy code into OTP (Erlang) applications, using test driven development.
- Development of REST API to access services on switch, using Swagger libraries/framework.
- Moderated full-stack workflow between Python backended webserver and switch services.

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.
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## Skills

### Languages

- *Imperative/OOP*: C, C++
- *Scripting*: Python
- *Shell*: Bash, PowerShell
- *Functional*: Clojure, Erlang, Elixir
- *Numerical*: MATLAB

### Software and Tools

- *Operating Systems*: Windows, OSX, Linux (Debian)
  - *Version Control*: Git
  - *Virtualization*: VirtualBox, VMWare, Docker
  - *Hardware*: Arduino, Raspberry Pi
  - *Lab Equipment*: Oscilloscope, Multimeter, Soldering
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