Andrew Booth

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Summary

Experienced and open-minded undergraduate student with the objective of obtaining a position as a computer engineer or programmer. Gained experience in controls engineering and modeling software development at Corning Inc.'s Sullivan Park R&D center. Relevant skills:

Working experience with:
- Allen-Bradley PLCs
- Rockwell Automation software
- Python Flask web framework
- HTML/CSS/JavaScript
- MATLAB
- Visual Basic for Applications

Proficiency in:
- ARM architecture and assembly
- MIPS assembly language
- C/C++
- Java & Processing
- PHP
- OSX, Windows and Unix

Experience

Intern with Corning Inc., *Corning, NY* **June 2015 – August 2015**
- Learned with basics of PLC system design including ladder logic, virtual axis gearing, and human-machine interface design
- Built web application for remotely controlling mobile phones through an automated SMS interface using the Flask web framework and the Twilio Python API
- Completed smaller projects on the manufacturing floor when needed

Contractor with Corning Inc., *Corning, NY* **June 2013 – January 2015**
- Improved proprietary application-specific modeling software written in VBA by reducing runtime by >10x and developed graphical interface to improve usability for other company employees
- Used and analyzed Micro-Epsilon confocal scanning laser polarimeter and Tropel Flatmaster for usefulness in active project

TA with UB School of Engineering and Applied Sciences, *Buffalo, NY* **September 2013 – Present**
- Graded and organized assignments for Engineering Principles course
- Led project based labs of 20-30 students every week

Education

Pursuing Computer Engineering B.S. at University at Buffalo, *Buffalo, NY* **September 2012 – May 2016**
- Focusing on embedded systems through courses in ARM architecture and assembly language, VLSI, and hardware/software integration
- TA for Engineering Principles course
- Member of Tau Beta Pi honor society
- Current cumulative GPA: 3.8/4.0

Östra Gymnasiet, *Stockholm, Sweden* **September 2011 – May 2012**

Projects

ARM Bomberman – Worked with a partner to design and implement Bomberman arcade game purely in ARM assembly, run on an LPC2138 Education Board
.edu Homepage Scraper – Web scraper programmed to pull data about various universities' homepage's web technology, including basic tag complexity and script & style resources
Drone Control and Deployment – Program developed in C designed to simulate delivery drone events, complete with task queuing and collision detection & avoidance
Verilog ALU Design – 32 bit arithmetic logic unit developed in Verilog based on the MIPS bit-slice processor architecture