Andrew D. 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:

- Pvthon
- ARM architecture and assembly
- C/C++
- Java & Processing
- PHP/Flask/NodeJS
- OSX, Windows, and Unix

Experience

Intern with Corning Inc., Corning, NY

June 2015 - August 2015

- Built web application for remotely controlling mobile phones through an automated SMS interface using the Flask web framework and the Twilio Python API
- Learned with basics of PLC system design including ladder logic, virtual axis gearing, and human-machine interface design
- 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

University at Buffalo, Buffalo, NY

September 2012 - May 2016

- Bachelor of Science in Computer Engineering, Summa Cum Laude
- Cumulative GPA: 3.8/4.0
- TA for Engineering Principles course
- Tau Beta Pi honor society member
- Broadening exposure in computer engineering subjects including machine learning, web development, embedded systems, and hardware/software integration

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

Personal Website – Designed and built website for presenting contact information, resume, and personal projects. Built with a Flask backend and a Javascript "frontend"

Drone Control and Deployment – Program developed in C designed to simulate delivery drone events, complete with task queuing and collision detection & avoidance

Commencement Ceremony Streamliner – Designed and implemented system for organizing graduates and announcing graduates' names over audio system at UB's Computer Engineering commencement ceremony with team of 9 colleagues