Benjamin Fair

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OBJECTIVE

Seeking an electrical, computer, or embedded software engineering internship or co-op, available starting December 2014; open to relocation, preferred city is Seattle, WA.

EDUCATION

The Ohio State University, Columbus, OH
B.S. Electrical and Computer Engineering, Expected Graduation: May, 2017
Overall GPA (4.00 scale): 3.897; Major GPA: 3.950

WORK EXPERIENCE

The Ohio State University, Math and Stats Learning Center, Columbus, OH
Calculus 3 Tutor (August, 2014 - present)
- Help students understand math concepts from College Algebra to Calculus 3
- Work 10 hours per week while maintaining full course load
- Explain complex material in a kind, interesting, and engaging way to help foster learning

Hilliard YMCA, Hilliard, OH
Lifeguard (February 2012-July 2013)
- Ensure the safety, cleanliness, and order of the pools at the facility
- Maintain continuous concentration for multiple hours

QUALIFICATIONS

Computer and Technical:
- Designing and prototyping electronic circuits both on a breadboard and FPGA
- Many programing languages including C, C++, Java, Python, MATLAB, bash, and some HTML, PHP, SQL
- Able to learn new languages quickly
- Programming microcontrollers including Arduino, Propeller, and MSP430
- Programming in a team using git and SVN for version control
- Using Linux since 2009, comfortable with the command line
- Some Linux networking experience including TCP/IP and DHCP

Coursework Includes:
- Computer Science: Software Development; Advanced C Programming; Algorithms I
- Mathematics: Calculus series; Differential Equations; Linear Algebra

ACADEMIC ENGINEERING PROJECTS

Autonomous Energy Vehicle Project   The Ohio State University   (January - May, 2014)
- Collaborated with 3 students to build and program a vehicle which could operate autonomously
- Vehicle was controlled by an Arduino, moved along a monorail using propellers, and stopped for specific amounts of time at different locations before picking up a load and carrying it back
- Feedback from distance sensor was used to allow the vehicle to stop precisely without extra power consumption from reverse thrust braking, no matter the load it was carrying or the battery state
- Created a flexible framework to simplify modifications to the code for new circumstances
- Individual responsibilities: Programming
- Results: Selected from class to compete in showcase against all classes, received third place.

HONORS AND ACTIVITIES

- Participant in OSU Hackathon, 2013-2014
- First Place in Computer Category, 4-H National Engineering Competition, 2011
- Honda-OSU Math Medal Recipient
- Participant in Ohio Supercomputer Center Summer Institute 2010 and 2011