Alex Fuhr

6309 Heatherhill Drive • West Chester, OH 45069• (513) 405-7617 • fuhr.8@osu.edu
http://afuhrtrumpet.github.io • Github: afuhrtrumpet • Linkedin: http://www.linkedin.com/in/alexfuhr

Objective

An internship, co-op, or part time position in hardware or software development during the school year or summer.

Education

The Ohio State University **Expected Graduation: May 2017**
4.0 GPA, B.S. Electrical and Computer Engineering (Computer Engineering Specialization)

Experience

BloomReach – Engineering Intern (Mountain View, CA) **May-August 2014**
Created a web application to simplify the retrieval and optimization of data extraction.

Zakta — Developer Intern (Blue Ash, OH) **June-August 2013, October 2013-April 2014**
Created and tested Java software to connect search results from other sites to Zakta's search engine using web scraping, APIs, and OAuth.

Wexner Medical Center — Software Developer (Columbus, OH) **January 2014-present**
Volunteer position: Wrote Java-based plugins for ImageJ to optimize image processing.

Deltalambda LLC – Consultant (Columbus, OH) **February 2014-March 2014**
Created and documented a functional hardware prototype of the company's idea to show to potential investors.

Technical Skills

- C#, Java, Python, C, and C++ syntax, data structures, common libraries, and version control using Git
- Electrical circuit prototyping, schematic and PCB design with EAGLE
- Usage of electronics components and ICs such as the 555 timer, relay, and serial interfaces
- Front-end web development with HTML, CSS, Javascript, JQuery, AngularJS, and Polymer
- Web scraping and OAuth as well as RSS, XML, and JSON-based APIs
- Microcontroller-based electronics and ICs with Arduino, Raspberry Pi, and TI Launchpad
- Server-side web development with Ruby on Rails, Django, Meteor, and Node.js
- Android development, common libraries, and Google APIs

Relevant Coursework

- **Current:** Software II, Foundations I (Math-based CS concepts), Electrical and Computer Engineering I, Differential Equations, American Attitudes about Technology (Technical Writing)
- **Past:** Fundamentals of Engineering Honors: Advanced Programming and Robotics, Calc III, Software I: Components, Engineering Economics, Linear Algebra

Activities

- **Engineering:** Open Source Club, Engineers for a Sustainable World, Collegiate Web Developers Group, Electronics Club
- **Music:** OSU Jazz Ensemble, Art Blakey Combo

Honors

- **First Place Head to Head:** The Ohio State University Fundamentals of Engineering for Honors robot competition
- **Designations:** OSU Fundamentals of Engineering Honors Program, AP Scholar with Distinction
- **Scholarships:** Maximus Scholar, Engineering Dean's Award, Hendrix Scholar, Mu Alpha Theta

Projects (more information and source on Github)

- **FEH Proteus Robot:** Designed, programmed, tested, and documented a fully autonomous robot designed to peform a series of tasks in a fictional candy factory. The robot won in the competition's elimination round.
- **Meteor Flies Drone:** A web application written in Meteor that allows many users to control a drone using two different control styles. Won Most Entertaining at Meteor hackathon.
- **Find the World:** An Android application where users can hide markers in a Google Map and then share the map so other users can try to find them.
- **DAE Sickness?:** A Django application that offers patients information on their condition from both medical resources and other patients, won popular vote at Cardinal Health hackathon.
- **Arduino-Controlled Christmas Lights:** Used an Arduino to control an EL wire and and RGB LED strip simultaneously with display to an LCD screen and input from buttons and potentiometer.