## Alex Fuhr

## 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

4.0 GPA, B.S. Electrical and Computer Engineering

## Experience

Zakta — Developer Intern (Blue Ash, OH) June-August 2013, October 2013-January 2014 Utilized the existing Zakta libraries and authentication methods as well as JSON, XML, RSS, and HTML parsing to write and test Java programs that connect search results from various search engines to Zakta's search engine.

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

Deltalambda LLC – Consultant (Columbus, OH)

February 2014-March 2014

Expected Gradutation: May 2017

Created and documented a functional prototype of the company's idea to show to potential investors.

#### Technical Skills

- C#, Java, Python, C, and C++ syntax, data structures, and common libraries
- Version control using Git
- Web design using HTML, CSS, Javascript, and JQuery
- HTML parsing and OAuth as well as RSS, XML, and JSON-based APIs
- Development in both Windows and Linux environments and command lines
- Microcontroller-based electronics and ICs with Arduino, Raspberry Pi, and TI Launchpad
- Web development with Ruby on Rails, Apache/PHP, and Node.js

#### Relevant Coursework

- Current: Fundamentals of Engineeing for Honors II: Robotics, Linear Algebra, Software I: Components
- Past: AP Physics: Electricity & Magnetism, AP Calculus BC (Calc I and II), AP Computer Science (intro to Java and Java data structures), Fundamentals of Engineering for Honors: Advanced Programming (C/C++ and MATLAB), Calc III

#### Activities

- Engineering/Computer Science: Open Source Club, Engineers for a Sustainable World, Collegiate Web Developers Group, Electronics Club
- Music: Collegiate Winds, Latin Jazz Combo, Jazz Workshop Ensemble, Jazz Lab Ensemble

#### Honors

- 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)

- Crowdsourced Restaurant Menu Application: A Rails application that allows users to document and review menu items for restaurants that might not otherwise provide an online menu.
- FEH Proteus Robot: Designed, programmed, tested, and documented a fully autonomous robot designed to perform a series of tasks in a fictional candy factory.
- Arduino Ocarina: Used a MIDI shield and Wii Nunchuk to simulate a musical instrument from the Legend of Zelda series.
- Modular Web Based Alarm Clock: Created at OSU hackathon 2013 as a team of 4, a desktop alarm clock that can be configured to read Web data such as Google Calendar and RSS feeds
- 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.