# Zachary Lawrence

### 112 Cheadle Loop Road Seaford, VA 23696

(757) 968-3925 | zacharyclawrence@gmail.com | www.zacharyclawrence.com

### **EDUCATION**

Bachelor of Science, Computer Engineering University of Maryland, College Park, MD Expected May 2016

Current Cumulative GPA: 3.7/4.0
Current Major GPA: 3.7/4.0

## COMPUTER SKILLS

Languages: Java, C, JavaScript, Python, SQL

Platform Frameworks: Amazon Web Services (EC2), JBoss Application Server, Tomcat, Heroku, Vagrant, MySQL, Ozone Widget Framework, Arduino, Android Software: JAX-RS (RESTEasy/Jersey), JDBC, Maven, Django, D3, Git, JUnit

## WORK EXPERIENCE

Google

Summer 2014

Engineering Practicum Summer Intern

- Collected metrics and improved reliability of internal Google tool by designing and developing a load testing framework based on HTTPS and RPC requests.
- Wrote multiple bug fixes by communicating between various internal Google divisions to determine the ideal solution the for most users.

## ITT Exelis: Geospatial Systems

Summer 2013

Software Engineer Summer Intern

- Researched the Ozone Widget Framework and created numerous widgets to demonstrate key concepts and ideas.
- Designed and implemented a RESTful web service to provide advanced analytics for image management and manipulation within the Ozone Widget Framework.

### Human-Computer Interaction Lab

Fall 2013 - Current

University of Maryland, Undergraduate Research

- Assisting Professor Jon Froehlich and Ph.D. Student Kotaro Hara on a project that uses images from Google Street View to locate sidewalk accessibility issues.
- Improved sidewalk detection rates by developing python code based on OpenCV.
- Used D3 to create a researcher dashboard to render pertinent statistical models.

## ADDITIONAL ACTIVITIES

### Hackathons

• MHacks: First Place

Fall 2013

- Worked with 2 colleagues in 36 hours to design, create and code a single stream recycling bin that sorts recyclable and non-recyclable materials.
- Bitcamp: Microsoft Awarded Best Hack

Spring 2014

 Spent 36 hours independently designing and creating a web service for real-time translation of SMS messages between two phones.

#### Engineers Without Borders

Fall 2012 - Spring 2013

University of Maryland Chapter: Peru Water Purification Project

- Investigated, designed and implemented a water purification system within a remote town in Compone, Peru.
- Selected, with 5 other undergraduate students out of a group of 70, to travel to Compone and conduct research on the water distribution system.