

# Zachary Wieand

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## EDUCATION

**UNIVERSITY AT BUFFALO**  
**BS IN COMPUTER SCIENCE**  
**MINOR IN MATHEMATICS**  
Graduated May 2017 | Amherst, NY

Summa Cum Laude  
Dean's List (8 Semesters)  
Cum. GPA: 3.91 / 4.0

## COURSEWORK

Data Structures and Algorithms  
Programming Languages  
Algorithms  
Operating Systems  
Machine Learning  
Scientific and Mathematical Computing  
Intro to Security  
Modern Networking Concepts  
Distributed Systems

## SKILLS

### PROGRAMMING

Over 20,000 lines:  
Java • C++  
Over 10,000 lines:  
Python • C  
Familiar:  
Android • Flask • HTML • CSS

## EXTRACURRICULAR

### ACTIVITIES

Secretary of Association of Computing Machinery  
Update Events Page of [ubacm.org](http://ubacm.org) on a weekly basis  
Organizer of UB Hacking 2014/15/16  
Member of University at Buffalo Division 2 Inline Hockey Team  
Participant of University at Buffalo Intramural Volleyball

## RELEVANT WORK EXPERIENCE

### LOCKHEED MARTIN | SOFTWARE ENGINEER ASSOCIATE, INTERNATIONAL SUBMARINE PROGRAMS

August 2017 - Present | Manassas, VA

- Created a Jenkins pipeline to provision a full virtual software development and runtime environments for Fedora Core 9 and RHEL7.3 operating systems.
- Led the migration of software and operating system components from Fedora Core 9 to RHEL7.4 and from RHEL5.4 to RHEL7.4.
- Designed and implemented a data recording and playback system for future analysis of core sensor data.
- Reduced disk usage 75% by migrating compile and development environments to Docker containers.
- Sped up the software deployment process by 30% using Ansible playbooks.
- Built a file parser to convert sigc++ API to boost signals. Saved team \$60,000 of labor hours.
- Risk Management Framework representative for my lab. Responsible for ensuring my lab is compliant with government regulation of classified assets and developing common security procedures across all classified labs at Manassas site.

### GOOGLE | SOFTWARE ENGINEER, TOOLS AND INFRASTRUCTURE INTERN

May 2016 - August 2016 (12 weeks) | Mountain View, CA

- Extended an existing iterative testing tool for Java regression tests. Allows engineers to run these tests 5 times faster.
- Added in a test case filtering feature to the tool for even faster test run speeds.
- Fixed race conditions and other bugs to speed up the release of the testing tool.

### GOOGLE | ENGINEERING PRACTICUM INTERN, GOOGLE APPS FOR WORK

May 2015 - Aug 2015 (12 weeks) | Mountain View, CA

- Implemented a shell script to automatically detect and repair missing test coverage for code review and submission of widely used libraries. Doubled test coverage for these libraries.
- Designed, implemented, and deployed a Java MapReduce job to report and fix 7 types of data corruption.

### UNIVERSITY AT BUFFALO | UNDERGRADUATE TEACHING ASSISTANT

Intro to Computer Science I & II | Aug 2014 - May 2017

- Taught 20+ students in lab environment and 200+ in lecture hall.
- Held weekly office hours to guide students through data structure and algorithm design.
- Graded midterm and final exam papers.

Operating Systems | Jan 2017 - May 2017

- Held 4+ weekly office hours to answer programming assignment questions and guide students through system design.
- Organized and participated in hack nights to help students tackle last minute bugs and complete programming assignments before the assignment due date.

### UB HACKING 2016 | LEAD WEB DEVELOPER

- Deployed a Flask web framework to a Digital Ocean Ubuntu server.
- Managed the operations of client and server side teams.
- Met with other team leads weekly to discuss additional features required.