# Drew Raymond Williams

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## EXPERIENCE

**FIRST ROBOTICS TEAM 2053 | ALUMNI AND MENTOR**          Endicott, NY | September 2012 – Present

- Lead a small team of students to program a robot while teaching them about software engineering.
- Created an OpenCV application to find field targets in real time on a raspberry pi and sent information about targets back to central processor.
- Implemented a motion profiler and path follower for a 4-wheel holonomic drive system.
- Created a GUI application in JavaFX to visualize paths for the robot to follow as well as export them to the robot.

**LOCKHEED MARTIN | SOFTWARE ENGINEERING INTERN**          Owego, NY | June 2019 – August 2019

- Automated user migration from legacy server to SharePoint system using C# for long range defense radar.
- Mocked-up new SharePoint site using HTML and CSS to customer specifications.
- Used internal REST API to automate population of Excel files and save our team 20 hours of work.
- Refactored old C# ASP.NET web application and added documentation to increase code readability.
- Added functionality to automatically update user's groups according to Excel file from web application.

**LOCKHEED MARTIN | SOFTWARE ENGINEERING INTERN**          Owego, NY | June 2018 – August 2018

- Created a script to automatically generate configuration files that saved developers two days of work a year on USPS Mail Sorting System.
- Isolated a bug in vendor's software for conveyor belt and communicated with them to fix the bug and update the program. This allowed the team to add more hardware interfaces without overflowing.
- Pinpointed a networking bug in software / hardware interface and updated configuration to fix it.
- Found and fixed a loop offset bug in a package sorting system while improving code readability.

**LOCKHEED MARTIN | SOFTWARE ENGINEERING INTERN**          Owego, NY | June 2017 – August 2017

- Created a C# application to help users verify software versions and dependencies on US Navy helicopter by importing CSV files and verifying characters limits, duplicates, etc.
- Ran software verification procedures on Air Force graphics boards for formal testing. Verified output on screen as well as console output.
- Worked on a team with other interns to design, build and program a fully autonomous robot to compete against other interns in a challenge.

**LOCKHEED MARTIN | ENTERPRISE BUSINESS SERVICES INTERN**          Owego, NY | June 2016 – August 2016

- Created an internal web application that tracks user's requests for new devices such as laptops and phones in order to decrease load on managers.
- Used SQL queries and databases to pull data into C# backend.
- Created a Tableau dashboard to see usage statistics for different projects.
- Worked with a team of interns and supervisors to present project to stakeholders.

## EDUCATION

**SUNY UNIVERSITY AT BUFFALO | BS COMPUTER SCIENCE**          Buffalo, NY | August 2016 - May 2020

Relevant Courses: Robotics Algorithms, Blockchain App Development, Software Engineering, Robotics Algorithms, Operating Systems, Theory of Computation, Software Quality In Practice, Intro to Algorithms, Data Structures, Computer Science Seminar

**VESTAL HIGH SCHOOL | SCHOLARS DIPLOMA**          Vestal, NY | September 2012 - June 2016

## SKILLS

Experienced In:    Java, C++, C#
Familiar With:     Python, HTML, CSS, Javascript, SQL

## AWARDS

3RD PLACE  Lockheed Martin Code Quest | April 2016

INNOVATION IN CONTROL AWARD  Pittsburgh FIRST Robotics Competition | March 2016