# Daniel Williamson

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#### Education

#### University of Florida

## Bachelor of Science in Computer Science

July 2016 - December 2020

Minors: Physics, Digital Arts and Sciences GPA: 3.50 / 4.00

#### Experience

# Undergraduate Student Researcher

## University of Florida Machine Intelligence Lab

Sep 2019 - Present | Gainesville, Florida

- Collaborated within a multidisciplinary engineering team on the system design of an Autonomous Underwater Vehicle, an Unmanned Maritime Vehicle, and an Autonomous Racecar.
- ◆ Designed algorithms utilizing cameras, sonar, and other external sensors (**ROS**, **Python, C++**) for perception, motion-planning, controls, and simulation.
- Reviewed code to ensure workability of autonomous robot for IEEE Southeast Conference, OpenRobotics Virtual RobotX and the Indy Autonomous Challenge, competing against 37 unviersities from 11 countries.

# Cloud Security Intern

#### Capital One

May 2020 - Aug 2020 | Mclean, Virginia

- Analyzed and understood the overarching threat landscape and developed strategies to deliver efficient, comprehensive solutions to satisfy those needs in an objective manner.
- ◆ Designed a CLI using **Python** to filter through AWS service actions based upon a risk threshold.
- ◆ Compiled reports based upon >4tb daily throughput of CloudTrail logs detailing vulnerabilities and suspect activity to enable governance and mitigate risk.
- ◆ Built and Automated **AWS** cloud architecture tools to within an **Agile** framework.

# Software Engineering Intern

### Lawrence Livermore National Laboratory

May 2019 - Aug 2019 | Livermore, California

- Participated in the research, design, and development of a first response tool for the National Atmospheric Release Advisory Center (NARAC).
- ◆ Created individual modules, components, and directives with single repsonsibility principal using **TypeScript** and **Angular**.
- ◆ Built scalable, RESTful API's, and file processing servers using **NodeJS** that reduced data size by >97%.
- Automated environment deployment using bash scripting and **Docker**.

# Product Designer

## General Relief in Prosthetics

Sep 2016 - Nov 2018 | Gainesville, Florida

- ◆ Led the research, prototyping, usability testing and design of prosthetic devices to improve utility to more than **70** users with an upper residual limb.
- Spearheaded 12 projects that included allowing the user to go fishing and play the guitar with one arm.
- Collaborated with other engineers, designers, and event management to promote STEM interest and offer local youth adaptive solutions for routine and recreational activities.

Coursework

Data Structures and Algorithms

Linear Algebra

Numerical Analysis

Modern Physics

Human Computer Interaction

User Experience Design

Computer Network Fundamentals

Skills	Languages	Frameworks	Tools
<del></del>	Python	Angular	Linux
	Javascript	NodeJS	Git
	Java	ROS	Docker
	C / C++	AWS	Adobe Creative Suite
	Bash	Keras / Tensorflow	Unity