Daniel Williamson

239 910 5858
danielw27@ufl.edu
http://danielwilliamson.me
https://github.com/DanielW27

Education

University of Florida
July 2016 - December 2020

Bachelor of Science, Computer Science
Minor: Digital Arts and Sciences
GPA: 3.44 / 4.00

Experience

University of Florida Machine Intelligence Lab
Sep 2019 - Present
Gainesville, Florida

Undergraduate Student Researcher
◆ Collaborating within a multidisciplinary engineering team on the system design and vision of a Autonomous Underwater Vehicle.
◆ Designing algorithms utilizing cameras, sonar, and other external sensors (**ROS, Python, C++**) for perception, motion-planning, controls, and simulation.
◆ Reviewing code to ensure workability of autonomous robot for IEEE Southeast Conference.

Lawrence Livermore National Laboratory
May 2019 - Aug 2019
Livermore, California

Computation Intern
◆ 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**.
◆ Automated enviroment deployment using bash scripting and **Docker**.

Autonomous Vehicle (Project)
Dec 2018 - July 2019
Gainesville, Florida

Software Engineer
◆ Designed and implemented a **Python** program to act as the brains for an autonomous vehicle.
◆ Utilized **OpenCV** to develop image processing and computer vision algorithms.
◆ Implemented deep machine learning through **Keras/Tensorflow** to identify other cars, a safe driving path, and over 35 different street signs.

General Relief in Prosthetics
Sep 2016 - Nov 2018
Gainesville, Florida

Product Designer
◆ Led the research, prototyping, usability testing and design of prosthetic devices to improve utility to users with an upper residual limb.
◆ Spearheaded projects that included allowing the user to go fishing and play the guitar with one arm.
◆ Collaborated with other engineers, designers, and users.

Coursework

Operating Systems
Data Structures and Algorithms
Linear Algebra
Numerical Analysis

Foundations of Digital Culture
Human Computer Interaction
User Experience Design
Computer Network Fundamentals

Skills

Languages	**Frameworks**	**Tools**
TypeScript	Angular	ROS
Python	NodeJS	AWS
Java	ReactJS	Docker
C / C++	OpenCV	Adobe Creative Suite
C#	Keras / Tensorflow	Unity