# **OBJECTIVE**

To obtain a software engineering position within a government agency to utilize and expand my computer science and engineering skills

## LINKS

LinkedIn:// quinton-davidson

## COURSEWORK (SELECTED)

### **UNDERGRADUATE**

Computer Networks
Computer and Network Security
Operating Systems
Embedded Systems
Computer Organization
Reverse Engineering
Algorithms
Programming Languages
Data Structures
Discrete Structures
Digital Logic Design
Cryptography
Calculus I, II

## SKILLS

### **LANGUAGES**

Differential Equations

C • C++ • Java • Python • Ruby OCaml • x86, AVR Assembly MATLAB • Bash • Verilog

#### **TECHNOLOGIES**

Robot Operating System (ROS) Ghidra • UNIX/Linux • OpenCV Arduino • Wireshark • LaTEX

# **AWARDS**

Dean's List • Fall 2017 - Fall 2020 Scholarship for Service • 2018 Presidential Scholarship • 2017 - 2018 National Merit Scholarship • 2017

## **EDUCATION**

## UNIVERSITY OF MARYLAND | BS COMPUTER ENGINEERING

Expected May 2021 | College Park, MD | Academic Honors | GPA: 3.86

- Scholarship for Service (SFS) full tuition scholarship awarded from National Science Foundation
- Advanced Cybersecurity Experience for Students (ACES) Honors College

## **EXPERIENCE**

### **NAVAL AIR SYSTEMS COMMAND**

**ENGINEERING AND ARCHITECT TRAINEE** 

January 2021, May 2020 - August 2020

- Developed code in Python to operate a ten servo pulley system with both programmable and user input control
- Prototyped a suitcase sized model of an electronic warfare simulation facility for integrating the pulley system

### LABORATORY FOR TELECOMMUNICATION SCIENCES

#### RESEARCH INTERN

May 2019 - August 2019

- Utilized LIDAR depth images to perform live object detection and tracking on people using a variety of robot arms/turrets
- Combined various open source softwares and algorithms into one real-time software pipeline using ROS
- Trained a computer vision machine learning model on thousands of custom LIDAR depth images
- Presented as a team to high ranking officials within the intelligence community

### May 2018 - August 2018

- Developed a Python API to communicate with a six-axis industrial robot arm
- Utilized a multi-camera system to evaluate sub-millimeter precision of simultaneous localization and mapping (SLAM) algorithms
- Used OpenCV to perform autonomous camera calibration and fiducial marker tracking
- Created ROS framework for an autonomous robot platform to perform precision indoor localization and mapping and RF signal finding within GPS-denied environments

## **PROJECTS**

### **ACES HONEYPOT PROJECT**

### Fall 2018

- Implemented and studied several high interaction honeypots to monitor differences in behavior between people on various hacker forums
- Wrote Bash and Python scripts to recycle honeypots and maintain a man-in-the-middle (MITM) command/keystroke logger
- Performed statistical analysis on attacker behavior between different forums including attack frequency and types of commands run