Quinton Davidson

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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
Differential Equations

SKILLS

LANGUAGES

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 2019
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