# **Owen Hughes**

### **Current CONFIDENTIAL DoD Clearance**

(302) 415-4787 | owen@owenhughes.info | owenhughes.info

## **EDUCATION**

### **Northeastern University (Honors)**

Boston, MA

Mechanical Engineering, BS/MS

Expected May 2022

GPA: 3.4

Relevant Courses: Mechanics and Design, Thermodynamics, Electrical Engineering, Material Science

Activities: AIAA, ASME, Intramural Volleyball

## Cab Calloway School of the Arts

Wilmington, DE

Activities: President of NHS, Eagle Scout, 1st Chair Clarinet All-State Band

### **SKILLS**

**Languages** - MATLAB, Python, C++, C#, Arduino **Design** - AutoCAD, SolidWorks(CSWA), Unity

Shop - Laser cutter, CNC Mill, FDM and SLA 3D printing

### **ENGINEERING EXPERIENCE**

## **NIA RASC-AL Design Competition**

Spring 2019 - Present

- Researched space technology and designed parts for novel lunar surface habitat
- Implemented new features into the design that advanced the team to the final round
- Simulated landings with advanced flight software

## Raytheon Integrated Defense Systems - Hardware Quality Engineer Co-op

Spring 2019 - Present

- Analyzed Wave and Selective Solder circuit card data for over 90,000 circuit cards to minimize defects
- Presented quality metrics at weekly tier meetings and drove root cause corrective actions
- Submitted change requests for circuit cards to eliminate design-related defects

### NU ReGame-VR Lab - Undergraduate Research Assistant

Spring 2018

- Programmed VR game in Unity to increase engagement for pediatric physical therapy
- Modeled a low-cost balance platform in SolidWorks to control the game
- Tested and improved gyroscope to ensure smooth gameplay

## **NU Physics Department -** Laboratory Assistant

Fall 2018

- Improved heat transfer for cloud chamber experiment in SolidWorks
- Prepared labs for over 100 physics students
- Calibrated electrical equipment and repaired motors

### **PROJECTS**

Imaging Telescope Summer 2018

- Designed and 3D printed telescope with internet-connected camera
- Motorized telescope with servos to control angle
- Interfaced with Stellarium to track stars as they move to take long-exposure shots

## Robotic Arm - Science Olympiad

Spring 2017

- Designed and automated robotic arm to accomplish tasks
- Led team to win at state level for the first time

### **INTERESTS**

Ham Radio (KB3WFP), Science Fiction, Space Photography, Backpacking