

Owen Hughes
Current CONFIDENTIAL DoD Clearance

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EDUCATION

Northeastern University (Honors)

Mechanical Engineering, BS/MS

GPA: 3.4

Relevant Courses: Mechanics of Materials, Thermodynamics, Electrical Engineering, Fluid Mechanics

Activities: AIAA, SEDS, Intramural Volleyball

Boston, MA

Expected May 2022

Cab Calloway School of the Arts

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

Wilmington, DE

SKILLS

Languages - MATLAB, Python, C++, C#, Arduino

Design - AutoCAD, SolidWorks(CSWA), Unity

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

ENGINEERING EXPERIENCE

AAS CanSat Competition

Fall 2019 - Present

- Designing a chamber to protect payload while in flight
- Conducting thermal and vibrational tests on payload
- Programming electronics to send real time data during flight

NIA RASC-AL Design Competition

Spring 2019 - Summer 2019

- 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 - August 2019

- 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

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