Owen Hughes

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EDUCATION

Northeastern University (Honors)

Boston, MA

Mechanical Engineering, BS/MS

Expected May 2022

GPA: 3.7

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

Activities: AIAA, ASME, Symphony Orchestra, Intramural Volleyball

Cab Calloway School of the Arts

Wilmington, DE

Activities: President of NHS, National AP Scholar, 1st Chair Clarinet All-State Band

SKILLS

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

Design - AutoCAD, SolidWorks, MATLAB, Unity

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

ENGINEERING EXPERIENCE

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 novel 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

Intro to Rocketry - AIAA, Northeastern University

Fall 2017

- Collaborated with team to design a 7 fin model rocket, reaching target height of 1600 feet
- Utilized Open-Rocket flight simulation software to predict apogee of rocket

Robotic Arm - Science Olympiad, Cab Calloway School of the Arts

Spring 2017

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

INTERESTS

Ham Radio, Science Fiction, Space Photography, Backpacking