Nicholas T. Masso

nmasso@protonmail.com [contact for additional information] nickmasso.com | United States Citizen

Education

Bachelor of Science in Aeronautical and Astronautical Engineering Honors *Aug. 2017-May 2021* Minor in Computer Science, Minor in Mathematics.

Awards/Certifications

Purdue Dean's List (2018, 2019, 2020, 2021), Level 1 High Power Rocketry Certification, HAM Radio Technician's License.

Skills

Microsoft Suite (Word, Excel, PowerPoint, Publisher), Linux OS (Ubuntu, Arch), LaTeX **Programming Languages**: Python, C / C++, Java, JavaScript, MATLAB, Simulink. **Software:** FreeFlyer, SolidWorks, CATIA, Inventor, Fusion 360, Eagle, Blender, VVVV. **Shop:** General safety practices, hand tools, soldering, laser cutting, CNC routing and machining.

Work Experience

Resilient Extra-Terrestrial Habitat Institute - Purdue University

Feb. 2020 – May 2021

Undergraduate Researcher

Project: Creating a MATLAB/Simulink model for the Lunar meteorite impact environment for use in RETHi's habitat simulation. Produced a written report detailing the math and statistics theory involved. Theory was presented at Purdue's undergraduate research conference in Spring 2020, software model presented in Fall 2020.

Rotorcraft Aeromechanics - NASA Ames Research Center

Jun. 2019 – Aug. 2019

Software Engineering Intern

Project: Created a Python module for quickly accessing and statistical processing NFAC wind tunnel data, which was integrated into a new data analysis program to replace a 20-year-old predecessor. Results documented in NASA report.

Introduction to Honors Engineering - Purdue University

Aug. 2018 – May 2021

Teaching Assistant

Working closely with teams of freshman engineering students, grading their work, and offering assistance in areas of physics, programming, and engineering concepts. Managing GitHub repositories and scripting updates for TAs and students.

Extracurricular Activities

Design Lead, Commercial Rocketry Team - Purdue Orbital

Sept. 2017 – May 2020

Directing the construction of rockets to fly on commercially available propellant, aiding in certifying team members for high-power rocketry, and performing flight and ground tests of sensors and electronics. HPR certified 6 new members. Launched test vehicle to 8000' AGL.

References

Timothy M. Whalen, PhD, Associate Director, College of Engineering 765.494.4473 | whalen@purdue.edu D. Marshall Porterfield, PhD, Professor of Biological Engineering 765.412.6792 | porterf@purdue.edu