

Charlie Nitschelm

384 Peverly Hill Road, Portsmouth, NH 03801 • (603) 923-9079 • Charlie6055@gmail.com

Objective: Find an internship or research position pertaining to materials science or aerospace engineering **Education: University of New Hampshire** – College of Engineering and Physical Sciences Aug. 2016 - May 2020, anticipated GPA: 3.84/4.0 | Honors Program | B.S, Mechanical Engineering | Physics Minor Microsoft Suite | Solidworks | Python | MATLAB | Lean & VSM | GD&T | Machining **Tech Skills:**

Experience: UNH Institute for the Study of Earth, Oceans, and Space

May 2017 - August 2017

Researcher

- Used Python to conduct a systematic search of the COMPTEL data for evidence of polarization from solar flares
- Organized necessary data sets and developed tools that will be needed for analysis
- Using the COMPTEL field-of-view, determined the number of source and background counts for that event, and then used simulations to estimate the polarization sensitivity for that event
- Created a systematic analysis of all gamma ray bursts that took place within the COMPTEL field-of-view

Shoal Interactive, LLC

January 2017 - present

Business and Marketing Intern

- Attend weekly meetings to decide business and product decisions with the team
- Assist with the applications user interface and administrative writing
- Lead major marketing campaigns to neighboring towns for the release of our Coupler's alpha

Relevant Orgs:

UNH Students for the Exploration and Development of Space

Mar. 2017 - present

Co-Founder, CTO, Head of Rocket Propulsion

- Lead overall managerial duties of the organization including running all meetings and overseeing the goals of the organization
- Foster a learning environment for all and manage all outreach and networking events
- Head the design and manufacturing for the rocket propulsion team, which includes a two-stage solid rocket booster
- Manage all tech leads to create a high-altitude rocket to participate in the University Student Rocketry Competition in September. 2018

UNH LunaCats Sept. 2016 - May 2017

Electrical Team Member

- Designed, fabricated and coded a robotic excavator to compete in NASA's Robotics Mining Competition
- Assembled and tested the electronics box so the rover can successfully compete at Kennedy Space Center for the 2017 NASA sponsored Robotics Mining Competition

UNH Precision Racing

Sept. 2016 - May 2017

Secretary, Powertrain Engineer

- Maintained all relations to the college and the surrounding community by providing outreach and an end-of-year banquet to all our supporters
- Assisted the design of the intake system and catch cans

STEMbassadors

Sept. 2016 - present

Member Lead in the Robotics Activity

- Volunteer in the New Hampshire area to inspire the next generation of engineers and problem solvers
- Run the World of Robotics activity where students can experiment with gear ratios and different wheel choices

Other Skills:

Project Management | Organizational Leadership | Creativity and Problem-Solving | Communication