Charlie Nitschelm

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**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

**Tech Skills:** Microsoft Suite | Solidworks | Python | MATLAB | Lean & VSM | GD&T | Machining

**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