THOMAS WILLIAM COLLINS

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To whom it may concern at the Summer Undergraduate Research Fellowship,

My name is Thomas Collins and I am a Junior at the University of New Hampshire studying Engineering Physics with a concentration in Mechanical Engineering. I began my Engineering Physics degree in Orono, at the University of Maine, where I studied for three semesters, before transferred directly to the University of New Hampshire. I believe that with my education and experience I would be a strong candidate for the position.

Throughout my time at the University of New Hampshire I have gained experience through;

- Working as an Undergraduate Research Assistant at Nuclear and Particle Physics Group Laboratories.
- Experience with manufacturing and analyzing structures in Students for the Exploration and Development of Space.
- Following the manufacturing process in different projects and programs.
- Computer aided design and computational analysis through Mechanical Engineering Courses.
- In depth education of Physics through the Engineering Physics curriculum.
- A strong desire to learn and teach others in STEM majors as shown in my tutoring experience through the Society of Physics Students.

To expand upon one of these points, manufacturing and analyzing structures in the Students for the Exploration and Development of Space. SEDS is an international organization specializing in the promotion of space exploration through education and engineering. As the Vice President of my chapter I oversaw leading design projects and delegating tasks to the member body. Currently our chapter is in the manufacturing and testing phase of making a hybrid engine for our first high power rocket. This design process incorporates simulation, modeling and computational analysis of each element of our rocket. The use of CAD modeling such as SOLIDWORKS has been essential in this project along with determining which materials are appropriate to use. The work that I have accomplished through SEDS and the other projects can directly relate to the work required of me through the Summer Undergraduate Research Fellowship.

Thank you for taking the time to review my application, I look forward to hearing back from you. If you have any questions about my Resume, Cover letter, or application please reach out to me and I will be happy to fill in any potential gaps.

Sincerely, Thomas William Collins