Dylan Shane 2073 Callaway Park PL Thompson's Station, TN 37179

Dear Hiring Manager:

I am writing to apply for the Aerospace/Mechanical Engineer II opportunity at GTL. Throughout my educational career—both graduate and undergraduate—I have been heavily involved in working with a systems level approach towards engineering and problem solving. I have become quite accustomed to working in multidisciplinary groups towards a common goal, and I believe this experience makes me a strong candidate for the role.

As an undergraduate at Vanderbilt University, I was a member of the Vanderbilt Aerospace Design Lab (VADL) which competed in NASA's Student Launch Initiative. For the competition, each team had to design, build, test, and fly a single-stage solid propellant rocket carrying a scientific payload. This entire project, by necessity, was a full systems-engineering project. It had to coordinate between many different teams, ranging from electronics, to structural, to aerodynamic, to avionics.

The competition also required multiple reports and review presentations to NASA. I was the one in charge of coordinating the report efforts, bringing together information from each separate team to create a coherent document. These reports required technical information, test results, full risk assessments and management analyses, and detailed budgets and bills of materials. The year I was in charge of this, the VADL won the Project Design Review award for our impeccable reports and reviews. We also won the Payload Design award and overall First Place title.

This commitment to multidisciplinary engineering continued into graduate school. During my time at the University of Texas at Austin, I participated in graphene research with fellow aerospace students, as well as mechanical and electrical engineers. Our overall goal was to develop a way for graphene to be utilized in production line processes. My research focused on graphene's interfacial properties in the hopes of developing a roll-to-roll transfer process. Other colleagues focused on various other aspects of the graphene lifecycle, ranging from its growth to the actual roll-to-roll system details. Constant communication between each research group was necessary, and my technical communication skills benefited greatly from it.

In the attached application, you can find my resume for your consideration. If you have any questions, comments, or concerns, feel free to contact me by email at <u>dshane28@gmail.com</u>. Thank you for your consideration!

Best Regards,

Dylan Shane