9/15/2018 Gloyer-Taylor Laboratories, LLC Tullahoma, Tennessee Aerospace/Mechanical Engineer II

Dear Gloyer-Taylor Laboratories Hiring Manager,

I am a graduate research assistant at the University of Nebraska-Lincoln (UNL) and will be graduating in December of 2018 with a Master of Science Degree in Mechanical Engineering and a focus in Thermal Sciences. The reason I am applying to Gloyer-Taylor Laboratories is because I am captivated by the aerospace industry and would relish the opportunity to work on challenging aerospace projects and I believe my education and work history make me an excellent candidate for this position. In addition to my engineering education I have been fortunate to have professional work experience in the agriculture, acoustic, vehicle safety, and aerospace industries.

My family raises cattle in north central Nebraska and from a very young age I was able to able to assist in this process and demonstrate commitment, resolve, and tenacity to solve problems with minimal supervision and guidance. I successfully kept pace with more experienced individuals and learned to overcome every challenge I faced. Through this upbringing I was able to develop hands-on skills and machinery knowledge that has continued to be important in my career outside of agriculture.

As a sound technician, I was exposed to diverse individuals and work environments. I worked alongside musicians, comedians, public officials, and a multitude of other groups and individuals. I was able to increase my hands-on electromechanical knowledge through the usage of microphones, amplifiers, and outboard audio equipment and through the repair of speakers and cabling. Also, this exposure to the acoustical industry has given me practical experience with vibrations and frequency filtration.

My current position in the vehicle safety industry has allowed me to work alongside civil, mechanical, and electrical engineers with decades of combined experience. I have completed challenging engineering projects including a remote operating system to pilot a full-size car using a video feed for Department of Defense infrastructure testing and am currently designing a concrete parapet mounted debris fence that will be used along high-speed roadways in Iowa. I have also been able to hone my communication and organizational skills through the creation of multiple full-scale vehicle crash testing reports, the presentation of diverse technical material to experts and nonexperts, and the proposal writing of a now funded research program.

Since August of this year I have been fortunate to work on a difficult aerospace problem, through the Department of Defense, to autonomously deliver a drone and payload behind enemy lines. This experience has given me first hand knowledge of rapid prototyping procedures and processes including 3D printing and laser cutting. This has also allowed me the chance to work with computer scientists and electrical engineers on an advanced multidisciplinary project.

As you will see in my enclosed resume my credentials include an established record of increasing responsibility and success in achieving various tasks and goals. I am passionate about working and solving complex technical problems and I believe that my skills can be an asset to Gloyer-Taylor Laboratories. Advanced coursework that I have completed or will be completing that can help me excel in this position include: Advanced Manufacturing Processes, Computational Heat Transfer, Viscous Flow, Heat Exchanger Design, Aerospace Propulsion, Turbomachinery, Vehicle Dynamics, Power Plant Design, and Project Management. Through my professional engineering work, I have been involved with mechanical stress calculations, control systems, trade studies, CAD modeling, engineering design, manufacturing, instrumentation, data analysis, and advanced testing. I believe my combination of knowledge and experience make me a perfect candidate for this position and I am confident you will see the evidence of my dedication and the results of dutiful, high quality work exhibited in everything I have completed and supported by my working colleagues. I look forward to speaking with a Gloyer-Taylor Laboratories representative to discuss this job opportunity and my qualifications in detail. Please feel free to contact me at the phone number or e-mail address provided above.

Sincerely,

Thomas ammon

Thomas Ammon