I am writing to express my keen interest in a summer internship with Carnegie Robotics. I am a junior mechanical engineer at Lehigh University with real-world working experience looking for an opportunity to build on that experience with an internship in the robotics industry.

Last summer I had a tremendous opportunity to work for Alcatel-Lucent in Bell Labs, which provided me with invaluable insight into the engineering industry. My objectives were to do thermal and acoustic analysis of key 4G, and eventual 5G LTE Base Band Units (BBUs), but I was able to expand on this initiative and work in a wind tunnel to determine some of the flow characteristics through the system, and through this analysis gain valuable insight on thermal system.

This experience, coupled with my competitive education, makes me a candidate uniquely poised to excel with a position at Carnegie Robotics. During my experience at Lehigh, I believe I have developed many of the key skills required to excel at this position, and have worked on several simple robotic systems. For example I have worked extensively in Arduino, including a program which controlled motors, lasers and a solenoid to accurately sort blocks of different shape, as well as becoming the TA for the introductory Arduino class at Lehigh. Also, in my control systems class I created an optimized pitch controller for a Boeing 737, including a SIMULINK model of expected performance

I welcome an opportunity to meet and discuss my qualifications and candidacy in greater detail. In the interim, I thank you for your attention and forthcoming response.

Sincerely

Brian Loughran