For the past eleven weeks I have been a part of the Summer Research Program at MIT Lincoln Laboratory on Hanscom Air Force Base. I worked in Group 46, Homeland Protection Systems. Every group at MITLL takes on different challenging projects and tasks for the government, mine specialized in security systems and monitoring systems. Specific technical tasks of my group include theory, design, prototyping and testing/demonstration.

This summer I was tasked with working on a proof of concept for a new security system. I researched, tested and designed specific sub components of the system to learn if a full implementation would be successful. I got exposure to embedded processing, transducer devices, testing practices and system design. I also had to document my research in an organized manner so that it was easy continue research once I was gone. I gave presentations on the system and my research to the Laboratory and to my team.

MITLL has a dedication to employee education and training, including summer hires. I was oriented with the Lab, cutting edge research and other trainings. I also took a class on presentation skills which increased my public speaking confidence and ability to give technical talks. The other important resource available to me was my mentor. He was extremely knowledgeable in the field and was able/willing to help me with just about any task. I learned a lot from his technical skills and practices.

The work I performed fit in very well with my education and career interests. The work I did this summer took knowledge in computers, math and physics, all of which I have training in. I am also interested in doing government related research right out of college so this was good exposure. MITLL has a unique mix of lab, academia and industry. This huge research atmosphere was previously unfamiliar to me; I got an idea for how successful projects come to be. Most projects in the Lab are not successful and it takes a willingness to fail to create something impactful. To quote the Lab’s director, “The research we do here is as much a science as it is an art.” I like the idea of that and I have been exposed to a culture that operates so.

Professionally, I have made many connections here at the Lab. I have gotten a better idea of the path I want to take and have gained valuable skills in my short time here. The two non technical skills that I have developed most at the lab are effective communication and personal initiative. I have had to create many presentations conveying our system and the research I have been doing. I was lucky to have a supervisor that was not afraid to give me plenty of criticism and help me organize my thoughts better. It has always been something I have struggled with; I have appreciated the push from him. Second, since I was for the most part on my own with this proof of concept this summer, I had to set my own goals and keep myself motivated. I seldom had someone telling me to do this or figure this out. I was thinking for myself and creating benchmarks for the system. My personal initiative and organization
of thought improved immensely over my time here. In the beginning I was not effectively using my time
and it wasn’t always clear about why I was doing something. I feel as though I have been able to make
my time more valuable which is a skill I will be able to use in almost any endeavor.

Being located right outside Boston, it is easy to find housing for working at MITLL. You can get there
from the city with public transportation; I relied on this all summer. Living on MIT campus would
probably be the right call for people unfamiliar to the area. Boston is home to incredible culture and
endless supply of activities.

The best feature of this job was the work environment. This includes the people, the culture and the
opportunities. MITLL truly is unique. The worst feature of the job was honestly the commute. I chose to
live in downtown Boston with my friends – unbelievable on the weekend, but a drag of a commute.