How I Spent My Summer Vacation

This post was submitted by Annlouise Assaf and Lynn Potter, PNTs’19 and members of the Parents Leadership Council Co-op Committee

Our son, Michael Potter, seems to be one of the very few students not on the co-op track here at Northeastern University. Instead, he is doing more traditional summer internships, but it is not quite as straightforward as might be expected.

Michael is a SMART scholar...yes, he is pretty bright, but he earned a three-year Science, Mathematics & Research for Transformation (SMART) Scholarship for service from the Department of Defense (DoD) in conjunction with the American Society for Engineering Education (ASEE). These scholarships are competitively awarded to undergraduate, masters, and doctoral students who have demonstrated ability and special aptitude for excelling in science, technology, engineering, and math (STEM) fields. The SMART goal is to produce the next generation of DoD science and technology leaders.

Michael's three-year SMART award started at the beginning of his third year at Northeastern, and will continue through the end of the 2020 academic year when Michael will have completed his coursework to earn both a BS and MS in electrical and computer engineering (plus a math minor!). During this time, the SMART program provides full tuition and all related educational expenses and fees, textbook allowances, health insurance allowance, and a cash award stipend paid at the rate of $25,000 to $38,000 per year.

In return, Michael must complete two summer internships and three years of employment at his “service facility” after he completes his education in 2020. Additionally, because Michael’s service facility is more than 50 miles from our home, he earns an additional $1,000 per week for travel and living expenses when he is engaged with his internship. All in all, it’s not a bad deal for him, or for us.

As part of the application process, Michael was interviewed by multiple DoD research laboratories from both the Navy and the Air Force, and was ultimately selected to become a SMART Scholar assigned to the Naval Surface Warfare Center (NSWC) in Corona, California. NSWC is not quite where you would expect a naval research laboratory to be; it is approximately 45 minutes east of Los Angeles, and not on the coast at all, but bordering a small lake located in the Inland Empire part of California. The Southern California coastline is nearly an hour drive away and the weather is almost always hot and dry.
Michael's first summer internship was undertaken this June, July, and August, and he had both a great time and a great experience at NSWC. Michael was assigned to a research group at the lab, and his mentor, Dr. Benny Cheng, put Michael to work right on his first day. Dr. Cheng, a well-known scientist with two doctorates, is pushing development at NSWC in machine learning and artificial intelligence. He tasked Michael to develop algorithms and computer programming scripts that performed deep mining of the vast reliability and testing data sets the Navy has accumulated.

This assignment was a perfect fit for Michael because his master’s degree concentration is computer vision, machine learning, and algorithms, and Michael really dove into the development of the software algorithms to provide new and more meaningful insights within the data sets, all under the direction and guidance of Dr. Cheng. For this internship opportunity, Northeastern University’s strong engineering program provided the perfect educational background to enable him to be successful in the workplace as well as on the cutting edge of research and technology.

Michael’s internship was not all work and no play, however! Despite 12-hour days at work, he managed to take advantage of his location and travel all up and down the southern California coastline. Starting north of Los Angeles at Venice Beach, he worked his way down to Mission Beach in San Diego, taking in a few beaches each Saturday or Sunday. NSWC even sent Michael to a data analytics conference in San Diego for two days, and Michael enjoyed the San Diego area so much he returned twice more on his own time to take in the San Diego Zoo, the Air and Space Museum, and even Comic-Con 2018 at the San Diego Convention Center. When Michael departs for California for his eventual employment, we are going to encourage him to get a two-bedroom apartment, one for himself, and one for us when we come out to visit, because I am not sure he is going to willingly leave the Golden Coast of California and return to our home on the East Coast!