

Findings through JUACEP

Name: Takumi Nishihata

Affiliation at Nagoya University: Umehara Lab

Participated program: Medium course 2024

Research theme: Friction analysis of surfaces using Fourier expansion

Advisor at the visiting university: Prof. Shaker A. Meguid

Affiliation at visiting university (Dept & Univ): University of Toronto



I embarked on my study abroad journey with the goal of expanding the range of people I could interact with through hobbies and work by improving my communication skills with English speakers. Additionally, I aimed to overcome the language barriers that often hinder effective communication. With these aspirations, I traveled to Toronto, Canada.

Toronto was unexpectedly a safe and comfortable place to live, with a standard of living comparable to that of Japan. Despite cultural differences, I found that almost everything I needed was readily available in local supermarkets. What struck me the most was the city's multiculturalism. Rather than being a society dominated by white people, Toronto was home to a diverse population, including Asians, South Americans, Africans, and, of course, a considerable number of Japanese residents. This diversity allowed me to integrate into the community without feeling completely isolated by cultural differences.

However, my research lab had only one other student, so expanding my social network required proactive effort. Initially, this was a challenge, but it ultimately motivated me to take initiative and actively seek out opportunities for interaction.

During my study abroad experience, I participated in numerous events through the university's Japanese association and gaming club. In particular, Halloween and Christmas were memorable occasions. I attended various celebrations, including a dinner with my lab professor, student gatherings within my club, a formal event at my host family's workplace, and a family party at home. Experiencing these holidays from multiple cultural perspectives allowed me to appreciate the unique ways different cultures celebrate the same event. It also gave me firsthand insight into the blending and mutual respect among cultures.

Through this experience, I successfully achieved my initial goal of eliminating my psychological barriers to living and communicating in a foreign environment. Additionally, I gained valuable insight into a truly multicultural society where diverse ethnic groups coexist with minimal discrimination—something Japan may also be in the future.

For students considering studying abroad, I want to emphasize that building relationships is the foundation for any new challenge. Establishing a secure social connection in a new environment is crucial. Instead of forcing yourself to make foreign friends right away, start by joining a Japanese community and gradually expanding your social circle. Taking it step by step and fostering relationships from nearby connections will serve as a strong foundation for any challenge ahead.

Findings through JUACEP in UW

Name: Takara Matsushita

Affiliation at Nagoya University: Dept. Micro nano mechanical engineering

Participated program: Long course 2024

Research theme:

Surface Treatment of Laser Powder Bed Fusion Components using Abrasive Waterjet Peening: A Preliminary Study

Advisor at the visiting university: Prof. Dwayne D. Arola

Affiliation at visiting university (Dept & Univ):

Dept. Materials Science and Engineering, University of Washington



During my six-month research internship at the University of Washington, under the supervision of Professor Arola, I gained invaluable experience. The research lab, with approximately 20 members, provided a stimulating environment where I had the opportunity to engage in cutting-edge research while immersing myself in a new academic and cultural setting.

At the beginning of my stay, I struggled to understand academic presentations in English, making comprehension quite challenging. However, through daily conversations with my lab members, I gradually became accustomed to it and eventually gained confidence in my research. Thanks to their patience and warm support, even when my English was not fluent, I was able to enjoy a comfortable and fulfilling life in the U.S.

Beyond research, my time in Seattle allowed me to fully experience American culture. I explored its unique food culture, visited churches deeply connected to the local community, and enjoyed outdoor activities that took advantage of the region's abundant natural beauty. Hiking is a popular activity in this area, and I took every opportunity to explore the stunning trails around Seattle. These experiences enabled me to truly appreciate the diversity of American culture and the beauty of its natural landscapes.

What I gained from this internship was not just technical knowledge. In addition to improving my English skills, I developed a deeper understanding of American culture and broadened my perspective significantly. My stay in the U.S. through JUACEP was an irreplaceable and invaluable experience in my life.