## Meaning of Nakatani RIES Fellowship: How would you describe the meaning/impact of the Nakatani RIES Fellowship

This program was very meaningful to me because it allowed me to learn more about Japanese culture and, in return, taught me more about my parents and their experiences living abroad. My parents lived in Tokyo as their first experience living abroad. Being able to explore the city of Tokyo and be fully immersed into the culture gave me some insight into my parents and what it must have been like for them to move abroad in a totally new country and culture. I also gained a new respect for them being able to navigate Japan without Google Maps!

I was able to experience a very rich culture and create a work life balance that allowed me to both spend a lot of time learning at my internship, along with spending as much time as possible exploring Tokyo and the rest of Japan. I tried to experience as much of Japan in the limited time I had to explore and was able to visit many different cities to get a taste of some of the many varied and rich cities in Japan. I was also able to learn a lot about electrical engineering research, which I had no previous experience in. I was able to learn a lot more about getting a PHD, and what kind of research and work is done to achieve that.

It also meant a lot to me to be able to meet and create connections with the members of the program. From the US side, I felt I was able to create many long lasting connections with the students. They were all so welcoming, and getting to know them has been a great experience. The JP current students and alumni have also amazed me with their warmth and hospitality. I couldn't have asked to meet a better group of people, and it means a lot to me to be able to create these life-long connections.

Research Internship Overview: Provide a description of your research project and experience during your research internship. How did your project relate to your current or future academic interests? What was the experience of working in international research setting like? What will you take away from your research experience this summer and what impact do you think this has had or will have on your future academic career or research interests?

My research project this summer was focused on creating a gas sensor made of graphene functionalized with copper oxide to detect acetone to assist in diabetes monitoring. To work on this project, I had to learn from scratch about gas sensing and how different materials can be used to sense gasses. I also learned about different benefits of functionalizing graphene with different materials. I am interested in medical devices, so this project taught me about how academic research is used with the goal of creating a medical device, in our case an electronic nose. I also wanted to learn more about different aspects of academic biomedical research, since my only research so far has mainly focused on biomolecular sciences. I achieved this goal and was able to learn a lot about electrical engineering and gas sensing. I really appreciate that I was able to explore some other interests of mine on this internship, and I look forward to learning more about what the field of biomedical engineering has to offer.

Lab Environment Overview: Provide an overview of what the personal environment of the lab was like. Describe the personality and working style of your research group? What was it like working with your research mentor/s and the overall group dynamic in the lab?

The work environment in my lab was very independent, with each member having their own work schedule. The members of my lab would often arrive at varying times and work individually. My previous lab experience was at a much smaller lab at Georgia Tech, with a greater lab community due to its small size. Each member also knew a lot about each other's research and was able to assist each other. The Tabata lab is much larger, and therefore this type of environment was not possible. I found that the members of my lab were much more independent than I was used to. Also each member seemed to have a stronger professional relationship with each other. I also found that my mentor's teaching style gave me much more independence to learn by myself. He would give me some guidance on what type of papers to look for but allowed me to conduct individual research. This initially led to some misunderstandings, but once I learned more about electrical engineering, we were able to understand each other much better.

Daily Life in Japan: Provide an overview of what your daily life was like in Japan. This could include the people you interacted with outside the lab on a day-to-day basis, food, your housing/living experience, your travels around Japan and the challenges you faced and the rewarding experiences you encountered over the course of the summer.

To give a full summary of what my day to day life was like in Japan, first I will describe my typical week day. I was rooming with Sofia this trip, so we would typically wake up at around 7 to get ready for the day. We would stop by 7/11 to grab a quick breakfast, usually a salmon onigiri and a granola bar. Lab usually started around 10am, and we would arrive at Tokyo university around 9:30 to hang out before lab started. For lunch, we would either go to the dining hall at Tokyo university or get lunch at the Family Mart. On some special days, we were able to coordinate with some JP alumni or current students to get lunch with us. These days would be the highlight of the work week! We would usually finish up lab around 5 or 6 pm. Sometimes we would adventure to new places in Tokyo after lab. Our favorite spot for some shopping and dinner was Tokyo dome city because of how close it is to Kasuga station, which is where we took the train back to our apartment from. We would usually get ramen at Ippudo and maybe some tea at Nana's green tea if we were in the mood for a treat. If we didn't go out for dinner, we would usually get some food at the 7/11 near our apartment. I also loved to go to the arcades in Shinjuku to play the claw machines.

On the weekends was when we would have some more excitement. Sofia and I tried to meet up with as many of the JP and US students as possible through dinners, lunches, and trips to different cities. To start off our weekends, we would try to coordinate to meet up with as many other students as possible. Keeping this in mind, we would start off our Friday with dropping off our suitcases at Tokyo station to leave for the earliest Shinkansen after lab to whatever destination we would be going to that weekend. We tried to hit as many cities and festivals as possible. This meant that we would also take the last Shinkansen back on Sunday so we could experience as much travel as possible! It was extremely rewarding to get to meet up with so many of the JP students and US students to hear about their unique experiences, and to learn as much as we could from them.

Experiences with Japanese Culture: Provide an overview of your most meaningful experiences with Japanese culture. This could be program activities or interactions you

had with your lab or within your daily life in Japan that you think best exemplify aspects of Japanese culture or values. What did the experience/s teach you about Japan? What did they teach you about yourself?

One of the most meaningful cultural experiences I had was when I was visiting Kyoto. Sofia and I stopped to get some udon at a local place. While we were there, it was completely empty except for us and one other man. After finishing up our udon, we started walking to a nearby trolley stop to go to Arashiyama. As we were walking, the man from the udon shop happened to pass us. As he passed, he waved to us and said "The udon was really good, right?". We both agreed, and thought that was the end of our interaction with a nice stranger. However, when we arrived at the trolley stop, the only person at the station was the same man. We greeted him again and he started talking to us in English. He told us about how he had previously lived in the US, and asked us where we are from. He also offered to help us with navigating the trolley, and even talked to the trolley conductor to tell him to remind us to get off at our stop. He was super helpful and excited to talk with us about Japan. I felt this short interaction highlighted something that I loved about Japan. Most of the people we met seemed extremely excited to encourage us to learn more about Japanese culture. To the point where strangers would give up their own free time to help us travel. The culture of hospitality and pride for their history was really amazing.

I had a similar experience with the JP alumni at the Nakatani event where we wore yukata and watched the fireworks festival. It was so much fun to get to wear yukatas, and I had a really fun experience both trying them on and seeing the fireworks. One of the best parts of this experience, in my opinion, was the reactions of the JP students and how excited they were that we were getting to try this aspect of their culture. They were super helpful and excited to show us around the Sensoji shrine and also tell us what food to get. Their excitement was so contagious. It really heightened my experience to be able to hear from all of them about their experiences and love of Japanese culture.