Findings through JUACEP

Name: Sida Li
Affiliation at home country: Electrical Engineering at UCLA
Participated program: Summer Course 2018
Research theme: Gate Leakage Based Timer Design for Biomedical Devices
Advisor at Nagoya Univ: Prof Kiichi Niitsu
Affiliation at Nagoya Univ.: Electrical Engineering

The Japan US Advanced Collaborative Education Program has been one of the most meaningful and fulfilling summers. JUACEP not only offers a rare opportunity for engineering graduate students to experience studying abroad but also to advance their research and handling skills. During the program of the summer I was able to analyze, design, and perform, research on the design of oscillator for biomedical devices. This work is directly related to my own research at UCLA and it could be used to strengthen my PhD topic in my future work. Along with the immensely helpful knowledge and experience that came from my work within the framework of the summer program. I am working with my lab at Nagoya University to submit my results to a conference for publication.

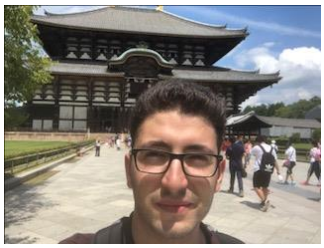
the activities that the JUACEP office arranged are all very meaningful and interesting. For example, the field trip to Toyota factory introduced us the great history and future of the automotive industry. The Asahi factory showed us how to produce bottles of beer and provided us with unlimited drinking. The engine workshop provided us a great hand-on experience.

Outside the scheduled JUACEP activities, I was also able travel around Japan and see many places I wanted to visit. Moreover, Japan is closed to China. My girlfriend came to visit me during holiday and we have visited many places we have dreamed of going to in Japan.

Too many things happened in the 10 weeks that I cannot write down them all in one page. So here I just want say thanks to Nagoya University and JUACEP program for providing me with this precious opportunity to enjoy researching and exploring Japan.

Findings through JUACEP

Name:
Affiliation at home country (Dept & Univ):
UCLA Mechanical and Aerospace Engineering
Participated program: Summer Course 2018



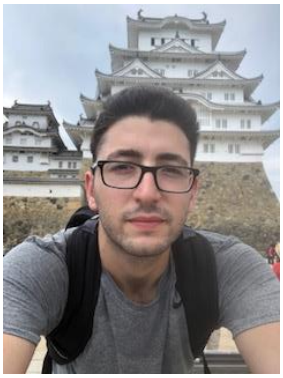
Research theme:
Advisor at Nagoya Univ: Prof. Hasegawa
Affiliation at Nagoya Univ. (Dept.): Micro-Nano Engineering

This summer was a very special one over all. Not only I was able to participate in research that is very interesting but also got to learn and experience the Japanese culture closely. I think this experience has improved my skills in robotics and gave a new perspective into other project that my colleagues were working on.

My research involved vision control of a nongrasping robot which juggles a devil stick. I have worked to fix an already existing robot and build a new environment for it. My work was very interesting and always got the chance to participate in other project and learn about new ideas that are being developed in this specific lab. My host Professor was extremely helpful with his guidance and feedback especially during the weekly meetings. Other members in the lab were also extremely nice and always willing to help with any situation. Sometime communication is hard, but we were able to understand each other at the end.

Living in Nagoya was nice, even though it is not a touristic city, but this gave us the opportunity to experience life in Japan rather than just being tourists. Nagoya has many beautiful places to go to and the University is also be nice. I tried to visit as many locations in Japan as possible with the amount of time I had. It was a great experience to visit all the major touristic locations. Transportation was a little confusing because of the tremendous number of train lines, but it became easier throughout my stay.

Over all this was one of my best experiences over all. I learned a lot from doing research and also had a lot of fun through program's activities and through my own travels.



Findings through JUACEP

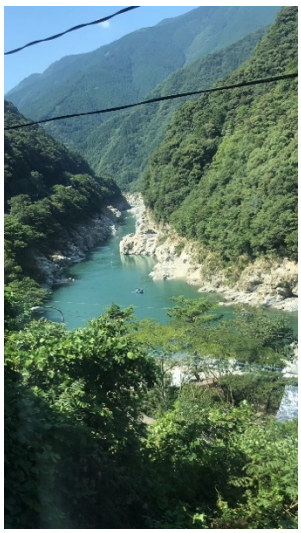
Name: Ziming Song
Affiliation at home country:
Industrial and Operations Engineering, Division of Integrative Systems and Design, University of Michigan
Participated program: Summer Course 2018

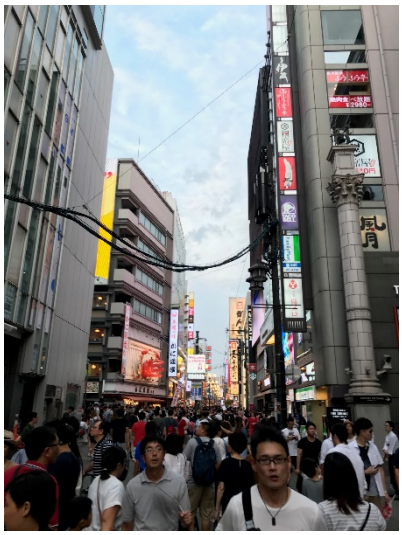
Research theme: Optimization of Rural Bus Network in Toyota City
Advisor at Nagoya Univ.: Associate Prof. Tomio Miwa
Affiliation at Nagoya Univ.: Department of Civil Engineering

Before I attend this program, I was always wondering about what is like to study and conducting in the Japan. As an international student study in the US experience the culture difference between my home country and US. Although I have visited Japan twice as a tourist before I attend this program but academic experience in another culture is a totally new experience to me. Fortunately, my supervisor Prof. Miwa is supportive if I have question regarding my research he is always available to answering me with in a quick time frame. Also, the TAs in my lab helped me to getting know the lab and equipment that I needed to do my research.

During my time in Japan I visited many new places that I've never been to in my previous trips to Japan. In the past I've visited most of the prefectures in Japan but I've never visited the Okinawa, Yamanashi, Kochi, Tokushima and Shimane prefectures. However in the weekends I took advantage and visited these places in different weekends.

In addition to the above, my experience in the Nagoya city is nice, Nagoya city has a fairly convenient public transportation network therefore I can visit different places in Nagoya easily. Also the living expense in Nagoya is very affordable compare to the living expense in the US. For example If I eat out for dinner in Ann Arbor I usually pay 15-20 US dollars for a meal in Asian restaurant. However in the Nagoya, I only need to pay 8-10 US dollars for a nice meal in the restaurants.





Findings through JUACEP

Name: Pieter Verberne
Affiliation at home country: Mechanical and Industrial Engineering, University of Toronto
Participated program: Summer Course 2018

Research theme: Investigating of mechanical properties of functionalized CNT sheet films
Advisor at Nagoya Univ: Professor Yang Ju
Affiliation at Nagoya Univ.: Department of Micro-Nano Mechanical Science and Engineering

When I was presented with the opportunity to go to Nagoya University to conduct research I was eager to attend. One of the primary reasons I was very interested in this exchange was to immerse myself in a different research environment and observe the difference in the research cultural between Japan and Canada. Additionally, through this program I was able to further expand my research interests and knowledge by conducting work that is extension to my primary thesis topic. Though I had some prior knowledge regarding this field, I never had enough time to dedicate to advancing my knowledge in the field. Through the program I greatly expanded my understanding of the principles of nanomechanics, methods for synthesizing CNT and CNT films, and the associated experimental techniques. This experience has given significant insights to this field and I believe this will greatly benefit my future career.

The predominant difficulty that I had during the exchange was my proficiency with the Japanese language. Coming to Japan I had no knowledge whatsoever regarding the language, coupled with the fact that learning languages is a difficulty of mine, I expected this to be a significant challenge. However, the Japanese class provided through the program greatly alleviated this difficulty. Though I am still very apprehensive speaking Japanese, I have been able to pick up on key phrases much better, increasing the positive interactions I have with others.

One of the greatest opportunities associated with this exchange is the ability to travel around Japan and experience the sights, culture and food. One of the first trips that I did while in Japan was going to Mount Fuji. Initially, I was only planning on climbing to the 7^{th} or 8^{th} station so that I was at least able to experience a portion of it. Owing to the progress that I was making I made the spur of the moment decision to climb all the way to the top. It was immensely rewarding, the views from the top were awe-inspiring and was a great personal achievement to climb all the way to the top. Furthermore, my parents were able to come visit me during the exchange and I was able to travel around with to Kiso Valley, Matsumoto, Takayama, Shirakawa-go, Kamikochi and Kyoto. This was the first time I travelled with my parents and it was a unique experience that I am especially grateful for that opportunity.

Overall, JUACEP was an amazing opportunity that I am eternal grateful for. I was able to make lifetime academic and personal connections and strengthen my own research abilities.

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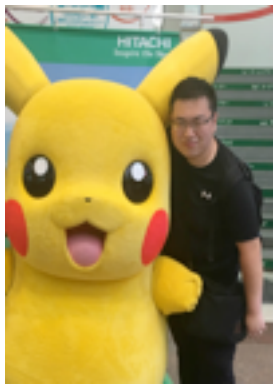


Name: Guanqun Yang
Affiliation at home country:
University of California, Los Angeles
Department of Electrical and Computer Engineering
Participated program: Summer Course 2018

Research theme: A Study of Autonomous Motion Planning of Mobile Robot By Use of Deep Reinforcement Learning for Fall Prevention In Hospital
Advisor at Nagoya Univ: Prof. Yoji Yamada
Affiliation at Nagoya Univ.: Department of Mechanical Engineering

The JUACEP is a program that enables us to collaborate with professors and students in Nagoya University to explore the field and topics of our interest. The experiences of this program will be discussed in three different aspects in the following.

The research atmosphere and academic community are different from both that of United States and China but many favorable features of these two are distilled into this institution, which is the leading research university in Japan. From the considerate mentorship and solid support of various hardware I need, I got into my research topic in a quite smooth fashion. Even though the heat is sometimes extreme here in summer, I find every single day pass very quickly since I got deeper into various fascinating algorithms and hardware that previously I had no access to.

The people and culture here also bear considerable difference from the countries I am familiar with, namely, China and United States. If one stay here for a relatively long period, he or she will not be amazed at the fact that so many quality products, something as small as a cable protector or something as large as cars, are designed or manufactured here. From my experience, the people here are so dedicated to their career and attempt to make every single detail all right. In fact, I truly like the deep learning platform -- Chainer since it resolves many configuration pains people will always encounter when they try to use TensorFlow and no wonder, it is created by a group of creative Japanese engineers.

One could anticipate disparate scenery when they come to Japan. Seemingly small in its territory, Japan, as the official slogan goes, have endless discoveries for you. During the JUACEP program, we have plenty of opportunities to visit different parts of Japan. We saw the prosperity and its preparation for 2020 in Tokyo. We felt the perseverance and optimism of this country when Kumamoto castle is reconstructed from every original brick and when local people are striving for normal life when ever-recorded rain hit Hiroshima. We also witnessed the broad horizon we have not seen for a long time in Hokkaido.

I would absolutely recommend this program to anyone who is interested in. Hopefully this program will continue to benefit more students.

Findings through JUACEP

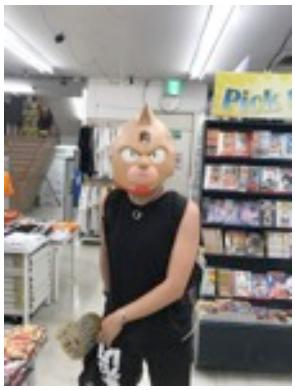
Name: Xuan Yang
Affiliation at home country:
Mechanical and Aerospace Engineering, University of California, Los Angeles
Participated program: JUACEP Summer Course 2018

Research theme:
Evaluation of gait stability in the use of a walking-assist device
Advisor at Nagoya Univ: Prof. Yoji Yamada
Affiliation at Nagoya Univ.: Mechanical Engineering

This was my first time to go to Japan. I've always dreamed of traveling in Japan and experience Japanese culture once from my childhood. This program made my dream come true. Not only did it give me the opportunity to have a sightseeing trip where I want to go, but also served as a precious chance for me to study and learn new knowledge in Japan.

I got to know my great professor and sensei, make Japanese friends and learn more Japanese. My research here is to analyze the gait stability in the use of a wearable walking-assist robot. This was also my first time to see this kind of amazing and helpful robot, which could prevent people who have trouble in walking from falling or tripping. I still remember the first day I came to Nagoya University. I was so excited and couldn't wait to experience everything like snacks, buying something in a コンビニ, having a meal in 食堂 on campus, etc. That day I met my TA 久保木君 for the first time. He was so nice and friendly to me and showed me around campus for the whole afternoon, even though he still had a lot of part-time jobs to do. I could say that day served as a happy and exciting day for me as well as a bad luck day. I lost my first stipend due to my excessive rapture and carelessness, which was really a great loss. My joy and excitement completely vanished but the sense of shame and regret overwhelmed. I told my TA. He helped to search for it with me and told Ms Kato at the same time. I was so impressed and touched that I found nearly all the stuff on campus began to help me look for my stipend. Not up to half an hour, one of them found my stipend and gave it back to me. I was so appreciated and felt the warmth and kindness of Japanese people.

Luckily, there was another JUACEP student Guanqun Yang, also from UCLA, working in Yamada's lab, the same lab as mine. We worked in the same lab and our seats were near. Gradually, we became close friends and always travelled together during holidays. We went lots of places like Kumamoto, Hiroshima, Osaka, Tokyo, Kyoto, Nara, Kagoshima, etc. He loves lamen. So he led me tried many different types of lamen in Japan. My favorite is 中本蒙古らあ麺. Since we both love animations. Every time we went to a new place, we'd surely spend several hours hanging around animate store, though we still had trouble reading Japanese. We were even lucky enough to see World Cosplay Competition. I'd like to put some interesting and memorable photos here:



A Memorable Journey in Japan

Name: Chenhui Zhou
Affiliation at home country (Dept & Univ): UCLA
Participated program: Summer Course 2018

Research theme: Aluminum induced crystallization of Si on STO substrate
Advisor at Nagoya Univ: Prof. Noritaka Usami
Affiliation at Nagoya Univ. (Dept.): Materials Process Engineering

It has been a wonderful experience for me this summer. I worked as a graduate researcher with Dr. Mel F. Hainey Jr. in Professor Noritaka Usami laboratory. I spent a lot of time not only on doing research but also had fun with other lab members and got involved in the culture here. The laboratory members are very friendly, and when I had problems of using lab equipment, they taught me step to step patiently. Dr. Hainey Jr. kindly guided me through the whole project and made sure I had understood the project and results. I also had chances to play basketball outside of the campus with Japanese people, went to one lab member's live performance, and had parties with all the lab members. All those memories are very precious to me.

JUACEP program provided many meaningful activities. The program staff Kato-san took us to Toyota factory and allowed us to see the culture and trending technology of one of the most famous automobile companies. Kato-san also took us to the Tokugawa art museum where a large collection of treasures and artwork inherited by the family of the daimyō class in the late Edo period were presented. In addition, the program provided us a chance to hand assemble combustion engine, which gave me a better understanding of the mechanism.

The program schedule gave a few long weekends that allow me to visit places outside of Nagoya. One weekend I went to Fuji Mountain with friends. And one weekend I had a chance to visit Kyoto/Osaka area, and enjoyed the sceneries there. During the past ten weeks, I was truly charmed by the culture and humanities in Japan. If you are planning to apply this program, Please do not hesitate. I promise you will have an unforgettable experience here.