Travel Report

My name is Shunji Lin, and I am currently a Master's student of the Graduate Program of Environmental Sciences (GPES) at the University of Tokyo, Japan. My research focuses on the study of computationally efficient methods in state space search.

I was able to attend and present our paper at AAAI-18 thanks to the generous International Conference Travel Grant from the Division of Multi-Disciplinary Sciences, Graduate School of Arts and Sciences, University of Tokyo. The purpose of the AAAI conference is "to promote research in artificial intelligence (AI) and scientific exchange among AI researchers, practitioners, scientists, and engineers in affiliated disciplines", and is considered one of the top conferences in the field of AI. This year the conference had a record number of submissions, exceeding 3800, from all over the world, of which 933 papers were accepted for presentation.

The conference was held at the Hilton New Orleans Riverside, located in downtown New Orleans, from 2–7 February 2018. As my first experience in an academic conference, the event was an eye-opening experience for me. I not only got to meet with and interact with established researchers and students from all over the world, I was able to learn about the latest and most exciting research spanning the many subfields of AI. Although the theoretical papers presented were very impressive, also interesting were the many interdisciplinary research papers that dealt with practical real world applications, from decongesting traffic, improving healthcare diagnosis to detecting art forgery.
On my part, I gave a presentation on our paper, titled 'Revisiting Immediate Duplicate Detection in External Memory Search', a research project I embarked on under the supervision of my advisor, Professor Alex Fukunaga. We explore the design of efficient algorithms which use solid state drives in order to solve problems with large search spaces, and as a result reduce the consumption of computational time and resource in certain problem domains. We not only received helpful feedback but also a general interest in the research topic, which was a pleasant surprise.

Another highlight of the conference were the many keynote talks given by reputed researchers in the field of AI. One interesting talk was given by Subbarao Kambhampati, president of AAAI, on the case for human-aware AI systems (HAAS) and the challenges behind designs these systems. While most AI research have focused on how to better human experts in complex tasks, there is a need for research on how AI systems can work alongside humans in collaborative efforts. In order to achieve this, the AI systems need to be able to model and respond to a human's mental state, which includes understanding and exhibiting emotional and social intelligence. These challenges pose exciting avenues for future work and I believe that advancements in HAAS will not only be beneficial for the field of AI but can also have a positive impact on our everyday quality of life.

Last but not least, we were able to enjoy the many sights and sounds of New Orleans. From feasting on delicious creole cuisine, enjoying live music and traditional jazz at the French Quarter to celebrating with locals and tourists alongside the Mardi Gras parades, New Orleans was an incredibly vibrant and lively city, making for an unforgettable experience. I would like to once again thank the Division of Multi-Disciplinary Sciences, Graduate School of Arts and Sciences, University of Tokyo for the generous support.