

IET Travel Award Report

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This report details the outcomes of a conference visit to IROS 2022, Kyoto made possible by the award of an IET Travel Award grant. The visit took place during a research visit in Japan and would not have been possible without the support of the IET, that of which I am extremely grateful for.

The IEEE/RSJ International Conference on Intelligent Robots and Systems is one of the largest robotics conferences that exist, with the 2022 edition hosting ≈ 4000 in person attendees with more online. The conference is major event for researchers in the field as it brings together top academics from around the world, as well as playing host to a vast array of industrial exhibitions showcasing the latest technology being developed. This year was the 35th anniversary of the event and was held in Kyoto, Japan at the International Conference Centre (the same venue where the Kyoto Protocol was signed which I thought was cool) with the underlying theme of “Embodied AI for a Symbiotic Society”, aiming to push the frontiers of robotics that one step further.

One of the major reasons I was hoping to attend the conference is that I am approaching the end of my studies with my submission date in March 2023, so I am currently searching for opportunities for the next step in my career. With this in mind, the conference was a perfect opportunity to network with top researchers in my field of interest and discuss potential roles or collaborations in the future. Similarly, the conference hosts some of the major robotics companies in the world with the top sponsors including the likes of Sony, Lionsbot, Woven Planet, Amazon and Kuka amongst others. With respect to this, I was able to get contact details from several notable figures to discuss an opportunity to undertake research with them, as well as the contact of internal employees at companies who were willing to put me in touch with the relevant internal hiring departments. Another major reason is because I have spent the majority of my PhD during the global coronavirus pandemic, so even though I was still able to publish in conferences and present my work, everything was in a virtual format; I never got to experience the true benefit of being able to have face to face discussions in a conference environment. After attending IROS, I can firmly say being able to have these discussions in person, ask questions and chat to presenters after their talks is 10x more productive (and much more fun) than when the conference is online.

As with every conference, there was a vast array of technical sessions, plenaries, keynote talks and poster sessions. There was also workshops available, of which I attended one based on Soft Robotics which proved very useful as it gave me an idea for my own research. Similarly, a lot of the technical talks have provided me with new avenues to explore in the future; one of the great benefits of attending a conference like this. In particular, I was able to have a discussion with a Professor at the Chinese University of Hong Kong (CUHK) regarding a collaboration on some work related to my

current research. He also gave me some key insights which have helped shape the final part of my PhD work, so this was incredibly beneficial. Although I didn't have a paper myself in the conference (unfortunately my submission was rejected), I was still able to benefit massively from the experience.

An unexpected benefit of being able to attend the conference was that my research group in Japan were also attending and exhibiting their work on the "Moonshot Project", a major project currently being developed in Japan and other partner countries by a consortium of institutions. Not only was it obviously enjoyable to be at the conference with them, but I was able to take part in the exhibition and discuss my work with the other members of the consortium. My supervisor in Japan is a very well known and respected figure, so it was very beneficial to be able to say I was working with him during these discussions. It was also really cool to see all the work they had been doing in the lab on display and being demonstrated!

So, after 4 days of an extremely busy schedule, forming new relationships and eating some great food, I was able to relax for a few days and enjoy the sights of Kyoto which were stunning. I would like to say a massive thanks once again to the IET for the support they provided through this grant; it meant I was able to reduce the costs to my institution by enough to make the trip viable and I enjoyed every minute of it.



