## 船井情報科学振興財団 留学報告書 2014 年 11 月 川口賢司 Kenji Kawaguchi PhD Student at MIT EECS & CSAIL http://www.linkedin.com/in/kenjikawaguchi

## Saying goodbye - Tokyo

After months of preparation (visa application, housing arrangements, packing and shipping) I was ready to go to the USA. My family, co-workers and friends kept asking me what I was going to miss about Japan, and I kept replying that I would miss sushi, but really, I wasn't thinking about what I was going to miss. Instead I was thinking about what I was going to gain in the USA. Maybe I couldn't eat fresh sushi every day, but I could find a new food to love, among many other things.

Ultimately it was easy to leave Japan. I was excited about moving, and ready for the challenge. So I spent my last days in Japan enjoying my favorite things. I ate so much sushi that I couldn't think about eating it again without feeling ill. I went to my favorite places in Tokyo (Tokyo Tower being one of them) and enjoyed a gorgeous night view with my wife. I stayed in a hotel in Okachimachi to enjoy Japanese hospitality one last time. And then, when I went through immigration at Narita airport, I just knew that it was time to say goodbye.

#### In between - Canada

I didn't go straight from Japan to Boston, MA, where I am attending MIT. I was lucky enough to spend two weeks in Québec, Canada, for AI related tutorials. The Funai Foundation was generous enough to offer summer school tuition and they covered my attendance to summer school there.

For two weeks I was able to immerse myself in tutorials, talks, workshops and AI. I learned a lot of new things. I was also able to use English, which was good practice for my upcoming arrival in Boston.

#### Hello! – Boston

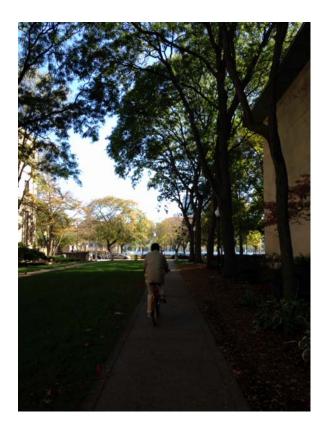
When I finally arrived in Boston my suitcase couldn't come around the luggage carousel fast enough! I quickly found a taxi, gave the driver directions to my new apartment and when I arrived I couldn't believe the view! I was lucky enough to get an on-campus graduate apartment and I live on the 10<sup>th</sup> floor, facing the Charles River. Even living in Tokyo I didn't have such a magnificent view.



I only had a few days to enjoy the sights around campus before starting a weeklong MIT professional course. Again, the Funai Foundation supported my attendance and I was able to study robotics, while experiencing my first MIT course along side other professionals from all over. The week went by quickly and at the end I received a completion certificate.

Finally, I could relax a bit...if setting up a new apartment is considered to be relaxing. There was still so much to do! My wife and I bought furniture, bikes, and learned how to navigate the area around our apartment. We found the closest grocery store, movie theater, restaurants, and even tried out some of the local dishes. My new favorite food is a tie between lobster and American style Chinese food. Even though the Chinese food in the USA is much different from that in Japan (or even China) I like it a lot. I even tried ramen (not so good) and sushi (surpassingly delicious) at a nearby Asian grocery store.

There's still so much to learn about Boston, and so much to still see and do, but every weekend I've tried to get out a little bit and learn a new area.



Now classes have officially started, I have a key to my new laboratory, and weekly meetings with my advisors. I also have a lot of research to focus on. So my explorations will have to wait until the next break.

# MIT - Laboratory

I work here: Learning and Intelligent Systems @ MIT CSAIL http://lis.csail.mit.edu/new/people.php

I am currently trying to solve the problems of the notion of probably approximately correct (PAC) in Markov decision process and that of Bayesian optimal exploration. Also, to approach the optimization problem in Artificial Intelligence (AI) domain, I am trying to improve general-purpose optimization method first, the concept of which would be something that I would be able to use as a base before thinking about how to leverage the structure of AI problems.

船井情報科学振興財団には心より感謝しております。本当にありがとうございま す。