船井情報科学振興財団 留学報告書 2014 年 6 月 川口賢司

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独立行政法人日本原子力研究開発機構に株式会社シー・エス・エー・ジャパン (CSAJ: Computer Simulation and Analysis of Japan) から出向中の川口賢司です。ここでは、私が留学について考え始めた時期から留学 先である MIT への進学を決めるまでのプロセスを簡単に紹介します。

The Beginning of the Beginning

To be honest, I am not completely sure exactly when or why I started thinking about pursuing a PhD at an American university. There must be a number of factors that I simply cannot pin down at the moment. As in a typical history lecture that tends to attribute a single major event to a few figures while ignoring the complex interactions of nameless people, here I confine myself to attributing my decision to only a few experiences.

I can at least say this with confidence – I had never thought about going to the USA until I met Professor Namatame. He was my advisor in University and he obtained both his MS and PhD from Stanford University. As a protégé interacting with a keen advisor, I



was inclined to follow in his footsteps. Unfortunately, after deep Kenji Kawaguchi (right) at FFIT Award Ceremony consideration I concluded that studying abroad was simply not a good option for me at that time, even though it seemed exciting.

Little did I know that that idea would get planted in my head like a tiny seed and actually take root. Since then, that seed has slowly grown through a number of experiences. After graduation I became an engineer in the computational nuclear field. While working I have both used and been astonished by many clever methods that were originally proposed by people working in American institutes, such as MIT, Carnegie Mellon University or Sandia National Laboratories. Also, I have met and interacted with many thoughtful American engineers (e.g., a graduate from MIT) and adept Japanese researchers who studied abroad in the USA (e.g., at Sandia National Laboratories). Through those experiences, I had heard several times that the USA is much more advanced in computer science than Japan. And so, I started to reconsider about going to go to the USA and finally after much debate, decided to apply to graduate school and see what would happen.

Application Process

First, I needed to get decent scores on both TOEFL and GRE. As one can see from my writing, I am not very good at English. My TOEIC score in university was only around 400 or 500 at most, which is a disaster for someone who wants to study overseas. Studying English was obviously my biggest concern in the application process. So, I changed my lifestyle. I tried to think only in English, I read English textbooks and research papers, talked with my friends in English, and watched many American TV shows and movies. As a result, by the end of last September, I got 161/170 in the GRE verbal section and 107/120 on the TOEFL ibt. After that, I wrote admission essays and my resume, and then applied for six schools around the end of December. Writing the essays and my resume was a rather enjoyable experience compared to studying for TOEFL and GRE. The application process was tough. It was especially difficult since I was studying and applying while working. I could not have finished this process without support and understanding from my wife. Here's some advice about applying for grad school; you should talk with your partner and friends to explain your situation as early as possible to avoid stressful misunderstandings. The point is not just to tell them that you are going to apply for an American graduate school, but to try to help them understand how it will affect your relationships.

Acceptance Notification and My Decision

I ended up being accepted by five schools. Before deciding which school to attend, I needed to decide whether or not I should go at all. This was because I have a job, which I love, and I will have to quit in order to attend school in the USA. Just as I got my acceptance notifications, I was informed by my work that I would be able to obtain a PhD from a Japanese school, without quitting. I thought very hard about my options and finally decided that attending MIT would be best for my future.

I have a lot of people to thank. More people than I can write on this page. First and foremost I would like to thank Professor Akira Namatame, Professor Hiroshi Sato, Dr. Mauricio Araya, and my wife for their strong support during the application process. I couldn't have done it without them. I would also like to thank Professor Sven Koenig, Professor Satinder Singh, Professor Emma Brunskill, Professor Zico Kolter, and Professor Frans Oliehoek for their kind advice and help. And I am very grateful to the staff, current students and faculty members who made the MIT visit day possible. In particular, I would like to thank Professor Leslie Kaelbling, Professor Tomas Lozano-Perez, Dr. Christopher Amato, Dr. George Konidaris and Mr. Lawson Wong for their exciting insights on research directions, helpful advice, and patience with a novice like me.

こうして私が留学を決意できたのも船井情報科学振興財団のご支援のおかげです。船井情報科学振興財団には心より感謝しております。また、益田隆司理事長をはじめ選考委員会の先生方、出願・留学・キャリアに関するアドバイスなど、大変親身になって支えてくださりありがとうございます。加えて、これまで

多くのことを学ばせて頂きました株式会社シー・エス・エー・ジャパンの藪下幸久社長、内山智曜様、独立行政法人日本原子力研究開発機構の丸山結様、石川淳様、今までご指導頂き本当にありがとうございます。