

Field Report

Gramoz Goranci
April 24, 2018

General impression of my research stay abroad

I did a research stay at Georgia Institute of Technology (Georgia Tech), Atlanta, Georgia from the 4th of January 2018 to the 13th of April 2018. I had the opportunity to closely work with Professor Richard Peng. Richard was a great host; he always found time to listen to my ideas and contentiously thought about our joint problems. Given that he is in the early stages of his career, the interaction with him has been smooth and pleasant. More importantly, our joint research attempts and endless discussions during my stay turned out to be quite fruitful, given that we managed to solve one of the core-stone questions in our sub-field, which in turn led to a submission in one of the top-tier conferences in the field of theoretical computer science. In addition, we analyzed many new ideas on different topics and we plan to continue working together in the future. I have benefited in many ways from my visit at Georgia Tech, especially given that I am currently at the final stage of my PhD. I believe that the work I conducted there will be one of the most important contributions in my doctoral dissertation.

Quality of the host institution

The College of Computing at Georgia Tech is considered as one of the best ten departments of Computer Science in the world, with a very a strong group in Theory of Algorithms, which is my area of expertise. Despite the fact that I do not believe that one should put too much weight on rankings, while I was there I could really feel the strong research atmosphere, especially when interacting with fellow PhD students. The faculty members of the group worked in diverse areas of Computer Science, including Theory of Machine Learning, Numerical Algorithms, Graph Algorithms, Theory of Markov Chains etc., which gave me the opportunity to talk to people outside my research area of comfort. Another element that made me realize that Georgia Tech is a top-notch school was the quality of the weekly colloquiums organized by the Algorithms and Randomness Center (ARC). During the spring semester 2018, they hosted many well-known speakers from top universities, e.g., MIT, UC Berkeley, CMU, etc. This was yet another unique opportunity for me to familiarize myself with problems that those renowned scientists are currently tackling, and how they approach them. From the administration point of view, everything was professional; the staff was helpful and answered all my questions during the stay.

Contacts within the host institution, inclusion in the organization

Overall, I felt that all the people of the group were very open and hospitable. Apart from my frequent meetings with my host professor, I also managed to spend a significant portion of my time working with two other PhD students of his group, and this was a very unique experience for me. On several occasions, I was also asked to accompany many visiting professors to dinner, and also had lunch with Professor Santosh Vempala, who showed real interest in the research problems I am currently tackling. Furthermore, I gave a presentation on one of my recent results at the student seminar, jointly organized by the Departments of Mathematics and Computer Science. Therefore, even though I was only a visiting scholar, I really felt included in all the research and social activities organized on campus.

Recommendations for future Marshall Plan students and fellows

I would really recommend Georgia Tech to all the prospective Marshall Plan students and fellows, especially those who are pursuing engineering degrees. The university itself is located in Atlanta, the capital of Georgia, and the campus is located in the heart of Midtown, which is one

of the best neighborhoods in Atlanta. The campus is stunning and spacious indeed, with lots of options for dining, which I found quite convenient. There were also many recreational facilities in close proximity to the Klaus Building, where the College of Computing offices are located. Atlanta is a very vibrant city, with a rich history and has been rapidly growing especially during the last years. The top must-see attractions that I would recommend are the National Center for Civil and Human Rights, CNN Center, Museum of Coca-Cola, Piedmont Park, etc. Living in such a great city comes at the cost of being faced with a huge accommodation burden. I had difficulties in finding some place reasonable and close to campus (especially if you are looking for short-term rent), given that living in a US city without a car seems more or less impossible. Lastly, I would recommend students to spend more time on learning the decent neighborhoods in particular cities, in order to avoid many 'no-go' areas. Personally, at the end I managed to find a proper place for myself, however only after deciding to substantially increase the amount I was planning to spend on lodging.

The final advice I have for future fellows is that they should make a real effort in finding a host that devotes substantial time in working with them, regardless of which institution they choose to visit or how prestigious the institution itself is. It is my belief that this is the most important factor that one needs to take into consideration when deciding to conduct a research visit abroad. In my case, this led to a real scientific discovery, and I am sincerely grateful to the Marshall Foundation for enabling me to achieve yet another academic success that further strengthened my publication record.