

RISE 2008 Internship Report

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After having heard of the RISE program by a friend last year, I decided fill out the application forms without knowing too much what my chances were. One beautiful morning of my March break week, I received an e-mail saying that I had been chosen for the RISE program for a project about theoretical biophysics. The project was involving statistical physics and computer simulations, two fields in which I had no experience at all. Thinking it was a great opportunity to learn these new subjects, and moreover having the opportunity to learn them abroad, I bought a plane ticket and hopped on a plane that brought me in Germany for the whole summer.

My stay in Germany started by the beginning of May in Berlin for the language course offered by the DAAD. I only had a few notions of German before coming, and they were put to use on my very first day since my landlady didn't speak English at all. The course was quite intense, and the lessons were given entirely in German, which was a surprise for me at first. In the first week, everything I saw in my one-semester course in university was covered! The teachers were also very nice, and I had a awesome time hanging out with the other RISE students of the group in the ever surprising and daily changing city that Berlin is.

From Berlin to Jülich, where my internship was based, I decreased by a factor 10^2 inhabitants, since the latter is a rather small town with around 30000 souls. I worked at the *Institut für Festkörperforschung* (Institut for Solid State research) of the *Forschungszentrum Jülich* (Research Center of Jülich), in the *Theoretical Soft Matter and Biophysics* group. On my first day, I was given a desk, a computer and a bicycle for the nice 5 km ride from the city to the research center. In Jülich, I shared a flat with two other guests, which were scientists at the research center, staying for a few weeks up to a month. Since they came from all over the world (Malaysia, Sweden, Italy, Russia, etc.), I had the opportunity to learn about several different cultures.

My project consisted of investigating swarming and clustering in systems of self-propelled particles, and the main mean of investigation was computer simulations. My schedule was very flexible. I could basically arrive and leave by the time I wanted. On a typical day of work, I was arriving

around 8h30 and leaving around 6h30. During work time, I was either reading scientific papers, writing some code, analyzing data or discussing the progression of the project with my advisor. By conducting a small project on my own for the whole summer, I really felt involved into research. At the end of my stay, I had to give a talk and to write a report about my summer project. It was a good challenge for me, since my native language is French. The atmosphere in the research center was rather different than what I was used to in my university. On one hand, I felt it was slightly more serious. I was also impressed by the number of guest scientists coming from other research institutions to our institute, giving talks about their research topics and discussing with the members of the group.

During the month of June, the research center was offering language courses of different levels, in which I took part with other RISE students based in Jülich. We had a small nice group, and the course ended at the teacher's house for a big dinner with all the students.

Working was one aspect of my stay in Germany, and stopping there would not do justice to what the RISE opportunity is. This summer also brought me the chance to explore a part of Europe, especially the beautiful country that Germany is, but also some parts of Belgium and the Netherlands. Since Jülich was rather small, I spent most of the weekends away, enjoying the charms that Europe has to offer. The weekend in Heidelberg, tightly organized by the RISE team, was also awesome; I met back my friends of the Berlin language course, but also a bunch of new people and had a wonderful time.

After this summer, I'm glad I took the big step and hopped on a plane towards all these new things. When I read the students report last winter before applying, a past intern had said those wise words, and I seriously can't find a better way to describe the opportunity offered by the DAAD with the RISE program:

The RISE experience is all about learning.

The RISE experience is learning about science and developing abilities as a researcher, learning about a country, its culture, language and manners, meeting new people and making friends, and finally, in all this foreign environment, learning about yourself. Being abroad is certainly not always easy, but after going through this whole experience, I can definitively say it is worth it.

I agree that my report and accompanying pictures are used by the DAAD in printed materials, presentations and on the website in order to inform funding organizations, sponsors and students about the RISE program.