#### DAAD RISE Germany 2023 Report

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# • Do you have helpful tips for opening a bank account, on traveling in and around Germany or on finding housing?

I used an online bank, Bunq, instead of creating a more standard bank account like one from Sparkasse. I found it easier to deal with, and it did not require any city registration document. It did not have any physical office, and topping up options with cash was a bit limited; however, these things did not matter to me as I just digitally transferred money from my American bank account when needed. For travelling, I strongly recommend the Deutschland ticket. For housing, I recommend WG as it provides flats with several students in it which can be a great environment to make friends.

## • What is your impression of research in Germany?

At my university in Germany, research was taken quite seriously. At the same time, I found that researchers and PhD students have quite flexible working hours, which is nice. Researchers were paid relatively well and seemed to enjoy their time.

## What did you find particularly interesting about your research?

I worked on two different topics. One is on a formal verification technique called k-induction on positive polynomial systems. The other is an extension of another formal verification technique called full-program induction to probabilistic program. What I found particularly interesting about the second one was the astonishing fact that one can apply the standard mathematical induction in a programming setting to prove assertions about the program variables (and the fact that no one else thought of doing this before two years ago).

#### Describe a typical day of your internship.

I wake up at 9:15 and get breakfast from a nearby Mensa Academica, usually chocolate croissant and cappuccino. I arrive at work at around 10:00. I work in a student room where there were sometimes other people also working on their project. I work until 12:30 when I get lunch alone or with some pHD students at my office. At around 17:00, I usually have a conversation with my mentor to talk about what I have been doing and what I should do next. I get off work at around 18:00 and take a bus or ride a city bicycle back home. I usually do not continue working on my research after I got back home.

#### Highlights of your internship (both personal and academic).

I visited five different countries in total: Germany, France, Belgium, Luxembourg, and the Netherlands. The trips across these countries were really great experiences. I met with other RISE researchers in my city, Aachen, and I will definitely see one or two of them later in my life again. These social connections and trips were the personal highlights of my internship. The academic highlight would be presenting my research findings and output to the group of PhD students and professors in my research group. It was a great experience to develop confidence while presenting academic material.

## Would you recommend the RISE program?

Yes, I would strongly recommend the RISE program to academically curious people, especially to those who haven't had much chance visiting Europe before. It is a nice balance of doing research but also travelling across Germany and Europe.

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