



Deutscher Akademischer Austauschdienst  
German Academic Exchange Service

**RISE — FINAL REPORT**  
*Reflecting on my Time in Germany*

**Intern:** Ze Yu (Thomas) Dong — McGill University (Montréal, Québec, Canada)

**Host Institution:** Ruhr-Universität Bochum (Bochum, North-Rhine Westphalia, Germany)

**Topic:** Civil Engineering

**Supervisor:** Judith Berns, M. Sc.

*“I agree that my report and accompanying pictures may be used by the DAAD in printed materials, presentations, and on websites in order to inform funding organizations, sponsors, and students about the RISE program.”*

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It has been an absolutely fantastic three months here in Germany working, learning, and playing. To everyone who helped me along the way; from the folks at the DAAD, to my supervisor, to my colleagues; it has been, in no small part, thanks to all of you for making this experience possible. As my Internship draws to a close, I would be remiss to not introspect upon the many memories made. This report outlines my thoughts and advice on certain aspects of the internship experience.

### **Immigration, Banking, Travel, and Housing:**

As a Canadian citizen with an internship lasting less than ninety days I did not have to obtain a visa or a residence permit.

My internship was funded in collaboration with Mitacs — a Canadian institution. They deposited the stipend directly into my Canadian bank account. Nonetheless, I found it extremely beneficial to open a German bank account. Being able to withdraw cash and make online payments without costly service fees and fluctuating exchange rates provided much peace of mind. I went with the N26 online bank. Registration was swift. The free account came with a virtual debit card that can be kept in a mobile payment app. To withdraw or deposit cash, N26 has partner stores that will perform these transactions.

Travel within Germany for me was easy and affordable. With the Deutschland Ticket I could take public transit and regional trains all across Germany. This proved incredibly useful not only for my daily commute, but also for shorter trips within the state or to neighbouring states. For longer trips, the ICE trains were my go-to transport. They are fast and comfortable, with affordable tickets if booked early enough. I recommend downloading the Deutsche Bahn app; I use it to store my tickets digitally, self-validate my ticket on ICEs, and search itineraries.

Housing was particularly difficult to find as, according to my supervisor, there is a housing shortage in Germany. The available listings were either too expensive, or not open to short-term rentals. Luckily, a new building was opened in Bochum, relatively close to the university that satisfied my needs. My supervisor was an invaluable resource in this search, as she was the one to inform me of the new opening, and could help expedite my application.

### **Germany's Research Scene:**

Research, at least in public universities, appeared to me as “work hard, play hard”. My colleagues often arrived early and left late. During the working week they were committed to their projects. On top of their own research, they also helped organise lectures and site visits for the graduate civil engineering students of the university. However, come break time and all talk of work would cease. My colleagues and I would enjoy lunch together in the *Mensa*, and discuss our plans for relaxation. It appeared everyone had a rich personal life despite the long hours. Some of my colleagues travelled often, while others practised sports regularly. There were some hustling for extra money, and even some motorcycle hobbyists.

## **Something interesting about my Research**

I was tasked with helping my supervisor with her research in the field of mechanised tunnelling project logistics. I first did a literature review of existing mechanised tunnelling project simulations to familiarise myself with all the important components, as well as the simulation software AnyLogic. Then, I began developing my own comprehensive model. What I found interesting was all the complexity of mechanised tunnelling. Before this internship, I had little knowledge regarding mechanised tunnelling. Now, I have a better grasp of not only the mechanical processes occurring inside a tunnel boring machine, but also the supply chain needed to feed the project.

## **A Typical Day:**

I took a tram to the university everyday, arriving at around 9:00. In the morning I would usually work on “easier” tasks such as filling in spreadsheets with literature data. I would head to lunch with my colleagues around noon. We would either go to the *Mensa*, or to *Rote Bete* (an on-campus vegan cafeteria). In the afternoon, I would do some programming using AnyLogic, and discuss the project with my supervisor. We liked to talk casually about it, bouncing ideas back and forth. I finished at around 17:00, and would either head home or get groceries.

## **Highlights of my Stay:**

In terms of academic highlights, one moment was when I got to go inside a tunnel boring machine on an actual construction site. Seeing the processes I am modelling in-person helped me stay grounded. Another moment was when my simulation model worked despite not using a specific Java class other models used. For some unknown reason I could not get that Java class to work on my machine, so I developed an alternative that worked around it. I was delighted when it worked out.

In terms of personal highlights, the freedom the Deutschland Ticket offered me, in conjunction with Bochum’s strategic location along a railway mainline, could not be understated. In essence, the entire state of North-Rhine Westphalia became my “backyard”. Thus, most of my time in Germany has been spent touring the state in cities such as Düsseldorf, Cologne, Bonn, and of course my home base of Bochum. I also visited the Externsteine rock formations — a contrast to the otherwise flat terrain. I thoroughly enjoyed the DAAD conference in Heidelberg where I made new friends with whom I later travelled to Berlin. As a train enthusiast, I also enjoyed the Deutsche Bahn Museum in Nuremberg.

## **Would I recommend the RISE Program?**

The RISE Program has helped me explore an aspect of civil engineering I have rarely considered. It has exposed me to new ideas, people, and opportunities. It has also challenged me to learn a new language, explore a new culture, and thrive in a new environment. It would be a disservice on my part if I do not recommend the RISE program to any and all prospective interns.