

### **GRANTEE EXPERIENCE REPORT**

Indo-German Centre for Sustainabilty (IGCS)
IGCS Research Exchange, Grant Period 2023

# experience report

**Nico Dabelstein** 





#### **Experience Report on IGCS Research Exchange, Grant Period 2023**

#### **IGCS** Grantee

Nico Dabelstein

## INDO-GERMAN Centre for SUSTAINABILITY

#### Home Institute

Technical University Berlin, EVUR

#### Host Institute | Host Supervisor

Dep. of Electrical Engineering, Indian Institute of Technology Madras, Chennai, India Supervised by: Prof. Dr. Krishna Vasudevan

#### Research Topic

Sustainable Urban Development Microgrid Control using Deep Reinforcement Learning

#### Starting/End date of the student exchange period

15.05.2023 - 15.08.2023



#### About the IGCS Grants

IGCS awards scholarships to students and researchers from India and Germany with excellent academic records, very good English, and intercultural communication skills. The scholarship consists of a mobility grant and an accommodation grant according to DAAD funding rates, as a rule. Learn more about the funding opportunities at IGCS <u>here</u>.



#### **Experience Report on IGCS Research Exchange, Funding Period 2023**

As a beneficiary of the IGCS scholarship, the participant has committed to sharing their valuable experience. This report is designed to encompass two distinct parts:

#### Part I: Written Testimonial

Only I am responsible for the content of the experience report.

Earlier in the year 2023 I participated in the winter school at IIT Madras. I got a first glimpse of the campus and was very impressed and excited to go back for a longer period. I was amazed by how peaceful the campus was and the amount of animals that were just roaming around campus. All in all, it seemed like an amazing learning environment, and I wanted to come back. After the winter school, I applied for the scholarship and got accepted for a three-month stay. I went to the IITM at the beginning of June 2023 for a research stay. I am currently working on my PhD and am collaborating with the electrical department of IITM for an ongoing project.

#### **Preparation**

Before applying for the scholarship, finding supervisors, and discussing a topic with them is important. The IITM is researching in a lot of fields which should allow suitable topics for most. To get in contact with supervisors from the Indian side you should talk to the IGCS staff and the German professors involved in the project. Once you find a topic you will need to write a proposal and apply for the scholarship. When planning your stay, you should be aware that the visa process can be time-consuming and there are a lot of documents required. I applied in Berlin where the Indian embassy outsourced the visa process to Bollywood Travels GmbH (http://www.ivs-germany.in). Make sure that all your documents are in order, I had to come back and reprint all my documents in color and better quality. Because of the uncertainty with the visa process, I would advise you to either start the process well in advance or wait to book a flight. I had to delay my stay for two weeks because of the visa situation and was very glad that I waited to book my tickets.

Depending on the length of your stay you should adjust your insurance accordingly, many travel health insurances only insure trips of a maximum duration of 30 days per trip.

When packing I would focus on light clothes and consider bringing a fitted bed sheet and a pillowcase since you will not get a mattress, or any bedding provided and will need to buy your own once you are there. I would also bring important medicine that you need but in general, you can get most things at campus or outside campus so even if you forgot something important most things are easily obtainable. Ordering online is also very easy and common. You can bring mosquito repellent from Germany which is a good idea for the trip from the airport to the campus but in general, the Indian mosquito repellent works well and is cheaper.



I would consider printing your acceptance letter from IGCS and IITM in case you get asked at immigration. On my first visit, I had to show my documents to the immigration officer and explain the reason for my stay. You won't have access to the internet there so it's easier to have your documents with you.

You won't have organized pick up at the airport so you will need to organize it yourself. The easiest way is to take a prepaid cab that you can book at the airport in Chennai before leaving the terminal. You will get a receipt and a cab driver will come and pick you up.

#### **Accommodation**

Regarding accommodation you can choose between two different options, either stay on campus in the student dorms or you can look for a room or apartment off campus. Both have their pros and cons. The rooms in the student dorms are relatively small and offer no amenities. The bathroom is in the hallway, and you will have to share it with many other students. On the other hand, the location of the dorms is convenient, and it will be easy for you to meet fellow students. Also, the rent for those rooms is very cheap. One other thing to consider is that the room will only be equipped with a small desk and chair and a metal bed without a mattress so you will have to buy your mattress and other inventory you need for a comfortable stay. There is no AC in the room so it can get very warm in summer. My room was on the inside facing the courtyard and on the second floor which meant almost no airflow into the room. I was told that rooms facing the outside of the building had a way nicer climate. If you go in the summer and get a room on the inside, I suggest applying to hostel management for a different room. Nights in summer with no AC and no fresh air can get very uncomfortable. Another downside of the rooms facing the courtyard is that there is a volleyball field and a basketball field and since it's too hot to play during the day many students play in the early morning and late evening. While understandable it gets very annoying when you try to sleep and its too hot to close the windows.

If you decide against staying on campus you can also look for apartments outside of campus. The upside here is that you can get AC and will most likely have better sleep. The downside is that you will have to commute every day and that rent prices are not that cheap, especially for short-term rent.

#### Studies at the host university

While working on my project I worked independently during the week and then had weekly meetings on Saturdays with the supervisors and other PhD students to discuss the progress. I enjoyed the independent working during the week and switched between home office, working from Café Coffee Day and the IGCS office quite often. The weekly meetings helped a lot in the advancement of my studies and the input I got from the supervisors was very insightful.



#### Working and living with local students and researchers

Everyone on campus was very welcoming and helpful and I felt at home quite fast. It often happened that I would sit alone having lunch or a coffee and other students would just ask if they could join to have a chat. It was a very pleasant experience and I even got invited to a wedding which was a wonderful experience. I made many friends, and I would suggest to everyone to go there with an open mind and talk to many different people.

The bureaucracy on campus is a less pleasant part of the stay though. You won't get much guidance on where to go and which forms you need to fill out, and it will require a lot of running around and going to different offices until you have everything settled. If you feel a bit lost, you should ask some other international students for help who probably had the same experience before.

#### Everyday life and free time

Chennai itself is not the most exciting city but there are still a lot of things to do and try. The food on campus and in Chennai is amazing. Only a few minutes away from campus is the Phoenix Mall where I spent a lot of time. You can get almost anything there ranging from clothes to food and there is an IMAX cinema. Cinema in India is an experience. While German cinemas are very quiet, Indians will cheer and applaud during the movie. The food inside the cinema is quite good as well. While Chennai itself does not offer too many tourist attractions it is very easy to visit tourist attractions like Mahabalipuram or Pondicherry a few hours away from Chennai.

Since I had meetings on Saturday my weekends were a bit short so on Sundays I sometimes went to nice hotels in Chennai and paid around 10 € to use their pool for the day. While not cheap it was a welcoming change of scenery.

#### **Practical information**

I would suggest trying to get an Indian SIM card as soon as possible. Also, you won't have internet access in your dorm room on arrival. Getting your credentials to access the internet takes some time and a SIM card can help until you are fully connected. The dorm rooms do not have Wi-Fi and you will either have to buy a router or have a LAN port on your laptop. Once you have your SIM card you can also use Uber and Ola to get around Chennai. I would highly recommend using these apps because they will guarantee better prices for you and the chances of paying too much are smaller.

When paying in India you will have to rely on cash which sometimes can be a bit problematic since India is shifting to a cashless system where most payments are done by apps like Paytm. The problem here is that you cannot use those apps with international credit cards and many credit machines in stores only accept Indian credit cards. You should try to make sure your bank is not charging too much for the money withdrawal at ATMs. Once you have the cash you should try to keep small notes with you, when trying to break the big notes you will often be declined.



When traveling through the country trains are a good option as they are cheap and safe. You can also book private cars or buses, but the traffic can be quite scary, and the ride might be uncomfortable.
Conclusion
In conclusion, the experience is well worth the challenges that need to be overcome during your stay. It is a very enriching time that I would not want to miss. And I want to thank the IGCS team and the supervisors for allowing me to study at IITM.



#### Part II: Digital Media

Grantees are invited to share their experiences in digital media, encompassing photographs, illustrations, or graphics within the context of the IGCS scholarship.









Figure 1: different animals on IITM Campus



Figure 2: Dorm room in Mandakini Hostel





Figure 3: Cafe Coffee Day on the IITM campus





Figure 4: Mahabalipuram (left) and Pondicherry (right)