

Report on the DAMOC student exchange program

Amelie Wagner

General Information

Name:	Amelie Wagner
Home university:	Technische Universität Dresden
Degree program:	Master of Science
Period of stay:	18.02.2019 – 22.04.2019
Host university:	NM-AIST Tanzania

Arrival

I arrived at Kilimanjaro airport at 19.02.2019 in the evening. My supervisor Dina picked me up from the airport and showed me my student apartment. I felt really welcome in Tanzania because my hosts had already bought some food and dishes for me. The next day I received my Tanzanian phone number and got a campus tour.

Project

During my stay at NM-AIST I worked on two projects: The real time simulator and the design of a security lab. The work on the real time simulator consisted mostly of setting up the different components of the simulator. The security lab is based on an existing example lab of Karlstadt university. The plan is that the students of the new Smart Grid study course at NM-AIST will participate at the lab. It was implemented in VMWare as a virtual network with four virtual machines: A vulnerable server, client, router and attacker machine. The concept of the lab, tasks and the sample solutions are documented in several documents.

The aim is to raise awareness for the topic security and security breaches in networks - it is also an important part of Smart Grids. One well known security vulnerability that is simulated in the lab is a man-in-the-middle attack and how to prevent it from happening. Other tasks of the labs involve the usage of network monitoring tools.

Encounter with Tanzania

My two months of stay in Tanzania were really impressive and I enjoyed my stay most of the time. The people in Tanzania made me feel very welcome - I was invited for dinner with the family of my local friends many times and had many

interesting conversations. My local friends also showed me the town, the market and explained me how to use the public transport system. The public transport system consists mostly of buses and motorcycles – but there is no schedule of departure or bus map. So I learned the names of the stops and the ticket prices from my friends.

Daily Life

I lived directly on campus of NM-AIST, which is outside of Arusha. On campus there is a beautiful landscape, it is quiet and safe, but there are few possibilities for spending your free time. As my local friends lived in Arusha, I often went to town after I finished my work for the day. For grocery shopping I mostly used the local market where you can find an impressive selection of different fruits, spices and vegetables. I even got to know some new fruits that I have never seen before. In comparison to German prices, food on the local market is really cheap. It is common to have a chat with the sellers on the market. Many sellers charge a more expensive tourist price to visitors, but even the tourist price is still cheap in comparison to Germany – and with bargaining it's still possible to pay the local price. In general I liked this concept of buying food, because it's easier to value products you buy if you get to know the producer. The disadvantage is that it's not as time efficient as buying food in a supermarket with fixed prices. I also experienced the conditions of living in a developing country, for example power cuts and water cuts. I learned how to cope with these problems from my local friends, like storing water in tanks. Some of my friends also used their own solar panels and batteries to bridge the time without power. Luckily I didn't experience these problems so often because I stayed in Tanzania during the dry season, in the raining season these problems get heavier. Because of the security situation, I couldn't do some things that are common in Germany after darkness: Leave campus alone, use public transport or walk around the city alone. The danger of tropical illnesses is also a problem, but it's possible to stay healthy for example by malaria prophylaxis and not drinking the tap water.

Traveling and Free Time

When I had free time on the weekend, I often stayed at the home of my local friends and we spent our free time together. We went to a small zoo with Tanzanian animals, to the cinema, to art exhibitions and swimming. We even participated in the Kilimanjaro half-marathon, where we ran 21km together. It was an outstanding experience, I never ran a half-marathon before, it was a big event with a nice atmosphere and mount Kilimanjaro in the background.



One weekend we traveled to Moshi and Marangu, two towns that are really close to Kilimanjaro. In Marangu we stayed at the house of a local friend, it was a more tropical environment because of the height. We went to church, and even though I'm not a religious person it was really interesting for me. In the last days of my stay, when I had finished my work at NM-AIST, the other exchange student from my university joined me and we did a Safari together. It was one of the most impressive things I have ever seen.



Conclusion

In total I really liked my stay in Tanzania and could definitely imagine to come back to Tanzania or Africa in general. Even though sometimes I felt really restricted because it's too dangerous be outside alone in some regions and at night, Tanzania is a really beautiful country with mostly open-hearted people.