





Report ERASMUS+ Traineeship at United Nations Development Programme As a Software Developer Engineering Intern in Copenhagen

Faculty for Mathematics and Computer Science (FK07) 01.09.2021 - 28.02.2022 Wintersemester

A. Company application procedure

I have found the Software Developer Engineering Internship on the UNDP jobs website and applied over their application platform. United Nations did not require any proof of language skills. After around five months I have got an invitation for an online interview. The interview took nearly 30 to 45 minutes and included basic interview questions and introductions and some technical questions about Software Development. Two weeks after I got a mail, that I can start the internship in September 2021. Meanwhile I have started to apply for an Erasmus Traineeship Programme at my home university in Munich with all the required documents and the confirmation mail from the UNDP.

B. Course and evaluation of the internship

I did my internship at the United Nations Development Programme (UNDP) regional office for Europe, UN City, Copenhagen, Denmark. UN City is an ultra-modern, eco-friendly building. It is built with a large focus on sustainability and environmental friendliness. Being an intern at the UN City offers 24 hours access to the building and also full access to all available facilities including gym, relaxation and worship room, and kitchen.

As a Software Developer Engineer Intern I was part of the SICU (Smart Infrastructure and Connectivity Unit) Team and worked with other teams like ITM (Information and

Technology Management) and Green Energy Solutions as well. This internship was a full-time (40h/week) position at the office. Because of the pandemic, some interns also worked remotely from their home countries. At the beginning we supposed to wear a mask in the building and show the corona pass to enter the building. After a while the restrictions were gone in Copenhagen.





My time schedule was very simple. Monday to Friday, 9-5, at the office. We had two times a week meetings with the development team as well as with the other teams to talk about the projects and the progress. For this we had mostly daily scrum meetings with the interns and once a week with the project leaders.

I worked with three other Software Developer Interns on different software projects. Part of my work was deploying and supporting online collaboration tools and business process automation solutions for UNDP Country Offices world-wide within the collaboration platform (Microsoft 365, leveraging SharePoint Online and Teams).

We developed solutions for business processes to replace manual and paper-burdened processes with the new evolving cloud-based functions by building automations and integrations with Power Automate. Furthermore me and other interns build applications that employ PowerApps for mobile enabled data entry, approvals and reporting.

Other projects I worked with were reviewing and improving solutions and applications which leverage JavaScript (jQuery and other advanced frameworks) HTML5 and PHP. I supported in expanding and refining these online business tools that leverage SharePointOnline and Microsoft Lists, particularly with view-formatting in JSON and data automation and visualisation particularly with the programming language Python.

Supporting the gathering, consolidating and analysing data for the tracking, analytics and data visualisation (developing dashboards) by using Excel, PowerBI and other business intelligence tools was also part of the work during my internship.

Being an intern at the UNDP gave me the opportunity to work in several tasks and projects with different teams and interns with different backgrounds. It was a great opportunity as an intern to bring own ideas to the projects as well and build applications and solutions together. I could improve my technical skills by learning new systems and programming languages.

C. Travel to the internship location

To travel to the internship location I have taken the train from Munich to Copenhagen over Hamburg. It took around 12-14 hours by train without delays. For my return I also have chosen the train back with one stop in Berlin. The reason why I took the train for both ways was first of all the sustainable aspect and second, to carry my bike and luggages without any additional payment compared to the plane. In total I paid around 430€ for the trains. I would recommend to book very early (especially if you need to book a place for the bike). Deutsche Bahn does not offers so many places for the bikes.





D. Accommodation

Finding a home is not the easiest in Copenhagen. But it is possible to find a nice place at the end. I started to look for a place three months before my internship started. There are several websites and organisations for accommodations e.g. <u>www.boligportal.dk</u>. But the best and most successful option is Facebook. I started joining more than ten different groups on Facebook where people posted available rooms or flats. Some of them are listed below:

- <u>https://www.facebook.com/groups/727677070953405/</u>
- <u>https://www.facebook.com/groups/815359711884205/</u>
- <u>https://www.facebook.com/groups/860497243973176/</u>

It is important to mention to be careful with scammers. Do not pay anything before you see the accommodation and landlord at least via video-call. In Denmark it is usual that you need to pay three months deposit plus three months pre-rent before you move in (depends on the flat and landlord, sometimes one month rent is enough as a deposit).

I found a place to stay for a month before I went to Copenhagen and stayed with international students. While being there I found another place to stay for the six months during my internship and lived with two danish girls. It was a great stay in Amagerbro close to the centre and the Amagerbeach which is gorgeous.

My rent was around 5700 danish kroner (=765 Euros) per month, everything included. I have mostly tried to cook at home, but I got mostly food from 7/11. For food and rent I paid around 1100 Euros monthly. For groceries I recommend supermarkets like Rema1000 and Lidl (vegetarian options available). Living quality is very good in

Copenhagen. Most of the flats are very clean, simple and modern, and cozy (`hygge` in Danish).

Denmark has a very good digital system. Once you plan to move to Copenhagen you should to register yourself into the danish system, to have an easier life and adapt yourself to the system. First step is to arrange an appointment at <u>SIRI</u> to get an EU-document which is necessary for the <u>CPR-number</u> (everyone who lives in Denmark is required to have a civil registration number called a CPR number). After getting these two things done, I have got a danish phone number to register myself for the <u>NEMid</u>. NEMid is very useful, because you can see your medical reports and other bureaucratic documents digitally with using your CPR-number and your NEMid, and also to open a danish banking account.

After registering for the CPR-number I have got a physical "yellow" card with my name, my danish address, cpr-number and the general practicer close to the place where I have lived.

E. Leisure activities (tips for leisure activities at the weekend, own excursions)

Until October the weather is mild and not very cold during the daytime, it is still sunny and bright. In Copenhagen I have use "GreenKayaking" a lot until October, which is a very nice concept. GreenKayak offers for two hours free kayaks to collect trash from the ocean and the







canals. They have a website where you need to book a time slot for two hours and collect trash. It is for free and for a good purpose. The season is from spring until autumn.

At the beginning I joined the Erasmus group for some trips in Copenhagen, but after I have travelled with my friends from Erasmus to Norway, Sweden and Finland.

Especially Sweden (Malmö) is from Copenhagen by train just 40 minutes far away and around 24 Euros. In Malmö I can recommend the sauna (Ribersborgs open air bath). It is a perfect day trip on a Sunday in winter times. Furthermore, Copenhagen offers a lot of opportunities to travel at the weekends, easily by train. Stockholm for example is just six hours by train. Beside that, I went several times to Helsingor (north of Copenhagen) which is around 45 minutes by train. There is a nice castle next to the beach. From there I took the fast ferry to Sweden/Helsingbor which takes 20 minutes (cost: 80 danish kroner oneway). It is a perfect day trip and not very expensive.

I can also recommend to visit the famous Louisiana Museum which is less than 45 minutes far away. For around 125 danish kroner included train and entrance ticket, you can explore the modern art museum (open air and indoor).

We also rent a car via "goMore" with some friends and did day trips to Roskilde and the Mont Clint which are very nice places to visit.

F. Integration and contact with local staff, contact with other interns.

As United Nations is a multi-cultural international organisation with different people all around the world, the local staff were very open and welcoming to me. I was integrated very quickly and felt comfortable during my internship at the UNDP. But the best experience I made during my internship was the contact with other interns. We had a Facebook and WhatsApp group with all the interns at the UN City.

I made some of my very good friends at my work and two of the interns are my best friends now. We travelled, worked, cooked, struggled, partied and studied together. So many young people all over the world at one place. We did a lot together as interns and organised events at the UN City and also beside our working place. In Copenhagen they have Friday bars, which means drinking and partying together at work. Most of the danish universities and companies offer Friday bars for their students and coworkers, where you can drink and party with your colleagues to know them better. I had unforgettable times. Beside that I have made friends over the Erasmus WhatsApp group as well and had the opportunity to meet other students living in Copenhagen.

Danish people are very friendly and welcoming. Everyone is speaking English very good. I have never had any trouble with communication and surviving in daily life. I would recommend to be open and talk to people.

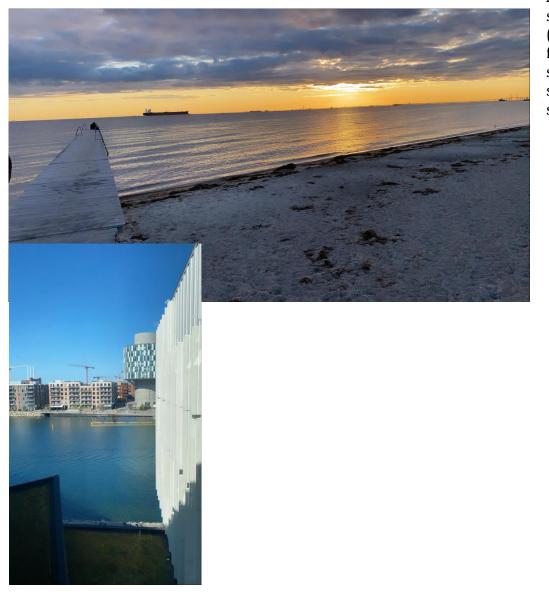
G. General conclusion and recommendations to any subsequent interns.







Overall I enjoyed being an intern at the United Nations in Copenhagen. I had a beautiful time in Scandinavia. A period of my life, where I got opportunity to find amazing new friends, to visit unbelievable places and develop my personal and technical skills. It was an incredible time with cold rainy days, tough goodbyes and losing important people as well. I would just recommend to subsequent interns, make the best of your time and try to make mistakes at work and beside work as well to learn and grow in different ways. And last but not least, Copenhagen is really expensive. Be prepared and spend wisely :) Enjoy Copenhagen. Hej Hej (=bye in danish) !



Amagerbeach sunrise (favourite spot for walks, swims and sunset and sunrise)







View from the UN City office

