

MARIN | Wageningen, Netherlands

Mughees

ETIT – Automation and Robotics – 5th Semester

04.11.2019 – 04.05.2020



MARIN

(Maritime Research Institute Netherlands)

MARIN is a Research Institute that caters to the International Maritime and Off-Shore Industries and the Dutch Government. It provides advanced hydrodynamic and nautical expertise to its clients. The institute is based in the small town of Wageningen and employs 400+ people.

The goal of MARIN is the development of cleaner, safer and smarter ships and other maritime constructions. One of the latest areas of research for the institute is Autonomous Shipping which should be of interest to the students of A&R. The institute offers Thesis and Internship positions to students throughout the year.

Wageningen, Netherlands

Wageningen is a small historic town in the Gelderland province of The Netherlands. It is located on the north bank of the Dutch portion of the river Rhine. The main city close to it is Arnhem which is less than 35km from the Dutch-German border. The total area of Wageningen is only 32.36km² and total population is only 38,774 (2019).

Wageningen is famous for Wageningen University (WUR) which specialises in Life Sciences and is top-ranked worldwide. Because of this, a majority of the population here is comprised of students (Dutch and International).



Tasks during the Internship

The main goal of my internship was the development of an Autonomous Water Surface Drone System in ROS. The idea was to convert the C-Drone (a small boat) into an Autonomous Sailing Platform. Some of the main tasks included:

- Interfacing of Hardware with ROS (Sensors and Actuators)
- Improvement of the existing monitoring and control system in ROS
- Implementation of Sensor Fusion, Localisation and Motion Control algorithms in ROS
- Sensor Development and Interfacing
- Improved programming in C++ and Python for ROS
- Working in a professional research environment
- Problem Solving and Analytical Skills





Impressions

This Internships was a much needed work experience for me as it was my first professional work experience in Europe which is related to my studies. Through this internship I gained important perspective into the work culture of European companies and research institutes. It was quite a learning experience for me both academically and professionally. This new work environment that I have experienced will definitely motivate my future job preferences with regards to the type of industry and job location. Overall, this experience has definitely changed my view of the European work culture in a positive way.

Culture

The culture in the Netherlands is similar to what I experienced in Germany in many ways but there are some very noticeable differences. The helping nature and the fondness towards cycling are the major similarities. Although, cycling seems to be a much more significant part of the Dutch everyday life than for Germans.

One of the differences I experienced was that Dutch use and prefer cashless payment options quite a lot then the Germans do. Even very small shops and weekly street market stalls that in Germany would only accept cash, here accept cards easily.



The first significant culture shock is that Dutch people are quite open, blunt and straightforward in their conversations. It may sometimes come off as rude or insulting but that's not their intent. The second positive culture shock was that almost everyone here speaks English quite well. This is true even for very small towns like Wageningen. This feels quite welcoming as an International Student. It is also one of the major differences from Germany where majority people prefer to speak German only.

Tips & suggestions for future Interns

- Use LinkedIn for searching Internships and set the region in your search to European Union (EU) or European Economic Area (EEA). This is how I found this Internship in the Netherlands.
- Don't be afraid to ask questions to your supervisor or other colleagues. Everyone here is quite friendly and helpful. They will even guide you on non-work related stuff like accomodation or other day to day issues.
- The best way to find accomodation here is to join the Facebook groups of your area. They are the best free source of finding short-term accomodation for your internship. Look for sublets from students going abroad as majority of other rooms here are offered on long-term basis. If coming to Wageningen, join „Wageningen Student Plaza“ on Facebook for everything from rooms to used furniture.
- Bring a bicycle with you if you have one or buy a used one from here as it is quite helpful in your daily work commute. Most of the time, your work place will be closeby which will make cycling quite convenient and allow you to save public transportation costs as well.
- You don't have to worry about learning Dutch before coming here for an Internship. You can get by quite easily with English. But nonetheless, if you have time than learning Dutch can be beneficial for you social interactions outside the workplace.



Life afterwards...

Now, I will be starting my Thesis back in Germany and I have learned a lot here that will definitely help me in the future. The most important thing I learned was how to work in a professional environment and how to carry out research related work.

My internship here overall was a really great experience both professionally and socially. The Netherlands was already a possible future work destination in my mind but now I have a very nice experience as well to back it up. I would definitely consider the possibility of working here in the future.



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