EXCHANGE REPORT	Name	Year and semester for exchange
	William O'Grady	Spring 2024

Exchange university

TU Delft

Degree programme

Computer Science

The Rollercoaster

Before departure / Overview

During my last year in gymnasium, we were invited to SACO-mässan, a convention where most major Swedish universities presented themselves in little booths to incoming students. By this point, I was still unsure about what attending university would be like, and even less sure which one to pick – but when the topic of studying abroad came up in the conversation, something clicked. When I finally ended up at KTH, the only thing certain on my mind was that eventually I'd spend a term abroad.

Three years later, after a lot of work and preparation, I was accepted to TU Delft. To be quite honest, there was no special reason for choosing TU Delft, beyond the fact that it looked like a great university. They had a program in Interaction Design that seemed top-notch, (we'll get to that later) and since I had never been to the Netherlands before, I felt excited about discovering a country that seemed new yet also familiar in in all the right ways. This exchange term meant my first time living away from home, and nothing could be more thrilling. My expectations then are now hard to summarise in words, as those dream images have been entangled with what I am now living; anyway, my expectations are usually too high. I was excited for everything, the joys, the problems, and everything in between. In the messages I sent to people when looking for accommodation, I wrote "*Most of all, I'm excited to meet new people and to explore Europe; to finally be on my own*". By those words, this term was more than a success.

Preparing for an exchange term feels like attending a separate course. Thankfully I had classmates and people at KTH to consult with, who made the process more palatable, and my excitement helped with the early confusion of travel documents and course lists.

This is where we get to what has been the biggest issue during my exchange term. I'm not attending the program that I came here for. My masters programme at KTH is Interactive Media Technology, and here in Delft they have an exchange programme for *Design for Interaction* which I thought was a one-to-one equivalent. Because of Media Technology falling under the EECS school back at KTH, and the Delft *Design for Interaction* falling under the Industrial Design (IDE) Faculty, the exchange overlords enrolled me in the Computer Science Master in Delft instead. According to KTH, there was no agreement between KTH and the IDE faculty. I chose the master I'm attending in KTH to get away from code-heavy, back-end style courses, but here I have been forced to dive head-first into the canals of functional programming languages and database management. I arrived early in Delft to try to sort this out, to perhaps change to the IDE faculty. And turns out, there *is an agreement between KTH and the IDE faculty*! But it was too late to change it around, and so I was stuck in Computer Science. This seemingly small error has been the bane of my exchange term: I have felt a lot of shame about how lazy and unmotivated my work has been here. I have been the weak link in all of my group projects, and have consistently had trouble studying since I neither have the precedence for the topics or the interest that studying them on this level requires. I will admit that I have not enjoyed the studying experience here in Delft, and did not give it my full attention either; save for some very good teachers and some interesting corners where I see my Media Technology & Design sensibilities being applied.

I'm glad we got that part out of the way, because in the words of my mom "you should be grateful that school is the only part that's not working, when everything around it is, and not the other way around."

At KTH, my life was school, old friends and my home in Sweden. My experience here in Delft has put me in a position where I feel it is me against the whole world. I don't think I even realise to what magnitude I have grown as a person, in what many ways I am forever changed, and that bubbling excitement that I had before my departure has only expanded and has become a core element of my being, making me anticipate the next of many adventures. I have met so many lovely people, more people than I could ever imagine; dealt with the housing crisis and finally found a place I can call home, organised travel and spoken new languages, gotten into a legal battle with an angry scooter-kid (and won!), partied with a pop-star in Berlin, learned tasty recipes, and most of all, confronted who I want to be and what I love to do.

Every day has been a new rollercoaster. I told my dad on the phone, and again when he visited this past weekend, that if there's anything consistent about this trip, it's the inconsistency. No day is the same here, I have had no routines other than my morning porridge and tea. I have no idea what each day might bring, if I'll feel terrible about my schoolwork or found a new crack at it that gets me ahead, if from minute to minute the sun will be shining down or the Dutch rainstorms will drench me, if I'll discover new corners of the Netherlands or lazily hang about the house with my roommates all evening, playing games and sharing music.

Upon arrival

I arrived in Delft three weeks early as I had not secured accommodation for the spring term. The best I had found was to rent a Ph.D. student's studio for a month, making it possible for me to scout for housing in-person, deal with the faculty situation before classes started, and finally to get myself settled into living abroad. The first few days felt endless, like I had been stranded on a desolate island. I called my mom about twenty times that first day, and since the Ph.D. student had a kitchen without any tools whatsoever, I had to make a pilgrimage to IKEA to buy a whole kitchen's worth of stuff, culminating in me cutting myself opening the new knives and spending the first night in a little wok restaurant, my hand wrapped in bandages and my face fantastically confused.

A week later, Samuel and Erik arrived, Samuel a classmate from Medieteknik, and Erik an old friend from my elementary school days. Us both ending up in Delft was a wonderful coincidence. By that time I was somewhat settled and felt like a total professional, an expert on the ways of the Netherlands, and spent those days exploring Amsterdam, Den Haag, Rotterdam, and Leiden. I also went to a lot of house visits. I would spend my days in a café by the square with my phone and my computer in Facebook groups and rental sites calling and messaging dozens of people trying to secure my place for the term. Finally I found a house in a little suburb east of town called *The Oyster House*, where some of the most clever international students I've met created a quiet little escape from Campus. Two days after my visit, I was accepted.

Before classes began, the university organised a few days of introduction activities to get to know the other international students. This is when I truly felt at home, and were some of the most fun days during the whole term. The amount of hands I shook in that weekend was incredible, and too was the energy among these people – it was a palpable electricity, everybody ready for an adventure!

Financials

I tried applying for scholarships before my trip but most of them either required year-long trips or I was too late. On average, I'd say the Netherlands is a bit more expensive, but there are exceptions such as alcohol which is cheaper, or fish, which is way more expensive. I applied for the Erasmus+ scholarship and merkostnadslån at CSN. University is free for me here thanks to KTH, what I pay monthly for other than rent is my bicycle which is essential to have in the Netherlands since bike lanes are prioritized over walkways. I do my best to save money here. I cook simple meals and take advantage of discounts in order to save up for travel, which is also so much cheaper, as you are close to so many different countries. I booked a trip to-and-from Paris by bus for less than fifty euro.

Accommodation

A mistake of mine (and Samuel and Erik) was to decline taking part in the university's service for student accommodation through DUWO. It cost ~250 euro to stand in the queue, and for some reason we were convinced this would never work for us. Turns out most people do get accommodation this way and we wasted a lot of time worrying about finding a place. Personally I'm happier where I'm living now as opposed to the DUWO apartments, but it would have been a much more obvious and smooth way to go.

As I mentioned before, my way to solve this was to scour the many Facebook groups related to finding accommodation in the Netherlands. Samuel and I would send links to each other relentlessly, making spreadsheets and lists, trying to avoid scammers (there were a couple of close calls!) and sending pictures of our smiling selves to anyone – pretty much anyone – in the hope of finding some place to stay.

If you choose to make the same mistake we did, and there are so many people who don't choose (or get) DUWO accommodation, for whatever reason: be patient and persistent, and you will find a nice place. Even Erik, who ended up in a mold-infested squat mere months away from demolition, but turned the place around to a nice, liveable space that made me feel proud.

University and studies

The university itself is very impressive. It's a large campus, and there are a lot of good areas to study. It feels very modern, and as Delft is a student town, feels big enough to find your spots yet always within the singular university/student atmosphere. In terms of academic practice, I much prefer the atmosphere at KTH, which to me is more inviting and forgiving. Each period I had three courses which all demanded a lot of attention. Looking past my disconnect with the content, most students I worked with found it stressful to engage with the content of each course, which leads to a feeling of only peeking sporadically into different areas and therefore not absorbing each course for what it wants to teach its students. Some teachers were really engaging to listen to, but others behaved quite rudely towards the class, for example my Research Methodology course where my teacher got upset at us when we couldn't figure out tasks he'd given us. We all agreed they were poorly explained in the (minimum) two hours of lecture material we'd watch before each lecture. "Why haven't you watched the lecture material?" he'd ask us. We did! It's not helping! Mostly though the issue stemmed from me not connecting with the content or working with people I didn't connect with, neither of which are the university's fault. As for the structure of each day, it's very similar to KTH: lectures and the odd practical sessions, depending on the course, leading up to either exams or project deadlines for reports & presentations. All the Masters' courses are in English and the teachers' English was always good. They do offer language courses, mainly Dutch, and I regret not attending them although I don't see myself wanting to learn Dutch, but simply to balance my workload alongside all of the CS courses.

Courses

The first period I took Socio-Cognitive Engineering (SCE), Educational Technologies (EdTech) and 3D Computer Graphics and Animation (3DCGA). The first two were the courses closest to my domain at KTH and therefore went very well in terms of my own contribution although I didn't learn a lot, I mainly reused the processes and strategies I applied to the HCI courses I attended in Sweden. After four or five weeks of struggling to get up to speed in the 3DCGA course, in which all of my colleagues had already done similar courses in their bachelor's, I told the lecturers I wouldn't continue taking the course, because we would have to start working on group projects and I would not be able to contribute anything, which would be unfair to my group mates. As for both of the other courses, I worked as the only foreign student in large groups, feeling both accepted among the Dutch students, who are notoriously insular. I got along well with them although I did not feel particularly proud of our work, which as mentioned always felt halfway done. I was shocked to find how the other members in my group would be happy with our results and got a bit unmotivated by that, leading me not to work as hard as I'd wanted to, which is odd considering how demanding TU Delft is; my realisation was that

it's not a matter of individual projects, but instead the amount of different work that is asked of you to do. In SCE we designed programs for a robot assistant to help dementia patients remember vital information about their friends and family. In EdTech, we proposed a service to help high schoolers learn financial mathematics (which was basically a rip-off of Kollin or Brilliant, but it worked). Ironically, from only four or five weeks I think I learned the most from the Graphics course simply because everything was new to me. In the other courses, I felt a bit let down as the solutions we went with were variations of what I'd already done at home.

In the second quarter I had another three courses: Web-Scale Data Management (WDM), Research Methods for Data Science (RM) and Language-Based Software Security (LBSS). WDM had great teachers and concepts that seemed very important, but as for the group project I ended up working with the wrong people, one girl who was an expert at this stuff and wanted to pursue it for her thesis, and a guy who never showed up to anything, so I was caught between feeling useless or at least being better than the other guy; this dynamic never felt right. At least I have a good sense of what the domain requires and different strategies for implementation. The research methods course I thought would be helpful for my masters' thesis next year, since it teaches students about analysing your data, but as I mentioned previously we did not get along well with the way the teachers wanted to relay this information. Lastly is the LBSS course which has been my least favourite course, I simply don't connect to it at all. It's about fundamental programming semantics, and while I can appreciate the structuring of the course and that it's probably great for people with a fingerspitzgefühl for writing compiler code and running tests, but it is the furthest thing from intuitive for me. I have given it a lot of patience, having friends explain it to me in detail, but at the end of the day this is a skillset I will never be able to enjoy or absorb well enough to do it myself.

City and country

I think Delft is a wonderful town, small enough to know well after a week yet big enough to find your own spots. The architecture and coziness is something the Dutch do so well to preserve in these historic towns, and on the whole this classic, almost storybook feeling is something I am always impressed with. The weekend markets, the canals, the veneration for food and nature. The Netherlands is so clean, so relaxed, yet you feel the pride its citizens quite rightly have towards their culture and environment. Since the country is so small, it is consistently interesting wherever you go. A regular weekend activity would be to bike to Den Haag or Rotterdam, which would only be 30-45 minutes away. Amsterdam is about 4 hours away with a bicycle, and there are no slopes! The transportation system is very convenient: your train card would work for buses and trams interchangeably, and it's comparatively very cheap.

My favourite place in the Netherlands is Leiden. I've visited Amsterdam a couple of times, Den Haag and Rotterdam a dozen times each, along with Utrecht, Arnhem and Eindhoven. But Leiden is the most beautiful, and a part of me wishes I had studied there instead. For Engineering, TU Delft is the best, but Leiden has a historic quality and a beautiful campus that excites me every time I go there. I was supposed to run a half marathon in Leiden about a month ago but it was cancelled due to the heat. However big my disappointment, those hours we spent picnicking on the grass in the Van der Werff Park made up for it.

I would describe the Dutch people as harsh in the best way possible. They're like the rich cousins you visit every couple of years. There's always life and celebration whatever the time of year. The dutch students keep to themselves – in Delft and Leiden especially, they

Leisure and social activities

I felt so impressed visiting the many great museums in the country. I got the *Museumpas* card, which lets you go to over 500 museums in NL / Belgium for free as much as you like, for about 70 euro; I haven't taken as much advantage of it as I'd like, but I still have many museums I'd like to visit and the

card lasts for a year, so I can always come back for a short trip in Fall. (The Van Gogh is still on the list, the Stedelijk, the Hieronymus Bosch museum…, and I actually missed out on the Keukenhof, sadly.

Most nights I would spend with my gang of friends – we call ourselves "The Bike Gang" – going to parties, playing games, going to the cinema, going for weekend trips to France or Belgium, having dinner together, studying together or do whatever the Erasmus student association would organise (which after a month became obsolete, we had more fun on our own). It's simple stuff, really, but finding new places to do these things made it all so much more fun. If I can sum it up, we were always exploring.

Sustainability

Well, in the Netherlands you move by bicycle or by train, and I since I'm doing Computer Science you're never required to buy any books. However, I am a big fan of reading and so I do buy a lot of books in general, especially when I'm visiting other countries, as souvenirs. But most of these books are used, because they're cheap and nice to look at. Most of the clothes I bought here was also in vintage shops, again it's so cheap and they have a great selection of shops catered to different styles. In our household we try to keep costs down for electricity, water, and so on. That's what I can say about sustainability.

Other recommendations and observations

I have many tips, but since I'm writing this while I'm still living here, it's hard to know what I've taken for granted during my trip. Maybe I'll realise a lot of those necessities later, when I'm back home. So for now, I'd say that the Netherlands is a great place to visit, and a place you can quickly get your arms around. I've always felt very safe here and quickly found great people to spend my time here with. If you're planning to study here or somewhere else, I would say it's one of the smartest choices you can make in your education. It has been tough and lonely but also exhilarating and so on and so on.

Thank you for taking the time to read all of this 😊

William