Erasmus+ Traineeship – Arctic Biology Department, University Centre in Svalbard (UNIS)

Programme: M.Sc. Applied Earth Observation and Geoanalysis

1. Preparation

The opportunity to do an internship in the Arctic came through my master programme's longstanding relationship with the Arctic Biology Department at UNIS, Svalbard. I expressed my interest to a professor, and from there everything moved quickly: introductions were made, meetings were set up, and I was put in contact with past EAGLE students who had already done internships in Svalbard. That network made preparation significantly easier. I got honest advice on clothing, layering systems, footwear, and which technical gear actually holds up at -20°C with wind gusts on top of it. As an international student living in Würzburg with limited winter gear within reach, this was genuinely useful. By the time December 2025 came around, I was working through past EAGLE packing checklists, watching YouTube videos, and cross-referencing department resources. I was well prepared by departure – arguably too prepared, given how much I overpacked.

2. Getting There

The journey itself was eventful. After three flight changes courtesy of SAS, we eventually set off on the 28th of February – first by train to Munich, an overnight near the airport, then two connecting flights via Copenhagen and Oslo (including another airport overnight). We touched down in Longyearbyen early on the 2nd of March. Looking down at the Svalbard landscape from the aircraft on that final approach made the entire travel ordeal feel completely worth it.

3. Accommodation

Accommodation in Longyearbyen has a reputation for being difficult to sort, and past EAGLE students have had some tough experiences finding somewhere to stay. We got lucky. Our contact at the Arctic Biology Department arranged access to an NTNU research cabin with a bunk room available for the full duration of our stay. It had wooden interiors, reindeer antlers on the walls, no Wi-Fi, and a cosiness that's hard to explain. We always shared the space with one other person, and it never felt cramped. By the end, it felt like home – which made leaving harder than expected.

4. Leisure Time

Before arriving, I had assumed there wouldn't be much going on socially. I was wrong. Longyearbyen has a genuinely active town life if you make the effort to engage with it. I joined the gym on a monthly membership, swam regularly, used the sauna, and went for outdoor runs even through minor snow blizzards. For slower days, the town has several good cafés,

especially *husky café* and *Freune*, therefore cappuccinos and chai lattes became a regular fixture.

Beyond the town itself, my colleague and I completed a polar bear safety and rifle licence course on arrival, which opened up the option to leave Longyearbyen recreationally. We made the most of it – day trips by snowmobile across the valleys and hikes out to mountain huts. Once you leave the settlement behind, you're essentially alone in a vast Arctic landscape, and that feeling is difficult to put into words.

The university also had a strong social scene. The student committee ran regular events – parties, game nights, film nights – and Friday evenings in the canteen brought the whole university together, with music, cheap drinks (by Longyearbyen standards), and a generally good atmosphere. I didn't even manage to take part in everything on offer. If you put yourself out there, Longyearbyen delivers.

5. Tasks and Working Environment

My traineeship centred on a project with a working title of *Integrating Thermal UAV Imagery for Reindeer Foraging Crater Mapping*. I worked alongside a French master's student researching the foraging behaviour of Svalbard reindeer – specifically the snow craters they dig while searching for food in winter. My role covered both field and data-processing components of her project, as well as occasional contributions to other ongoing work in the department.

A large part of my time was spent doing fieldwork in Bjørndalen and Adventdalen. Working in small teams of three or four, we located reindeer groups and carried out UAV surveys collecting thermal and optical imagery, which was later processed into thermal maps and orthomosaics. We also conducted snowpack measurements on site – recording depth, temperature at different layers, moisture content, and other physical properties – to provide ground-truth data alongside the drone imagery.

What I appreciated most was the balance between being outdoors and working at a desk. Some days meant several hours travelling across snow-covered valleys in Arctic conditions; others, particularly when weather ruled out fieldwork, were spent in the computer lab processing imagery, doing data entry and QC, and supporting GIS and remote sensing analyses.

We also helped out with other research projects in the department when extra hands were needed, which gave a broader picture of the scientific work happening at UNIS and introduced me to people across different disciplines. The working environment throughout was genuinely collaborative and welcoming. Despite being an intern, I never felt like an outsider – researchers, technicians and fellow students were all approachable and willing to share knowledge. Contributing to active field research in an Arctic setting, both professionally and personally, was an experience I won't forget.