

Electronics Developer (Thesis/Working Student)

Start date: flexible

Your Mission

You always wanted to build electronics that will fly in space?

OroraTech is developing a constellation of nanosatellites with infrared cameras for automated wildfire detection, severe weather warnings and various other applications.

You will be working in a very dedicated and highly motivated team of experts in the fields of optics, electronics, spacecraft and software engineering. Most of our team previously worked on the MOVE-II CubeSat and the MOVE-ON high altitude pseudo satellite project at TUM chair of astronautics.

Together with our engineers you will be working on simulation, development and verification of multiple parts of our satellites, including the imaging sensors, power supplies, embedded microcontrollers, and support equipment. The camera will be the primary payload of our CubeSats.

Currently we are conducting tests with our IR camera payload which is going to be launched in January 2022. In parallel, we are redesigning our camera and the support electronics for the second generation with increased requirements regarding stable operation, temperature management and uptime. The first productive satellite will be launched in Q4/2022, followed by a constellation of up to 8 CubeSats.

This is a general overview of the skills that we look for, based on your experience and motivation we would define a specific thesis topic together with you. Fresh ideas are also welcome! In general, we combine a university thesis with a small working student job (e.g. 8 hours per week) to cover the non-thesis related work..

Responsibilities

You will be responsible for a project/task in the field of electronic circuit design, embedded software development, FPGA development, etc. (to be discussed based on the current development schedule and your interests)

Profile

Not everything is obligatory, depending on the actual project:

- Enrolled in electrical engineering with a focus in Embedded Electronics, FPGA Development, or similar.
- Practical experience (acquired at prior jobs, internships, university projects, etc.) in:
 - o Circuit Design, PCB Design (Altium), Soldering, Testing of Electronics Hardware
 - o Programming/Scripting: RaspberryPi, Arduino, Python, C/C++
 - Using lab equipment like Oscilloscopes, logic analyzers, ...
 - Hands-on work (tell us about your side-projects!)
- Basic Linux/Unix knowledge (Shell usage).
- Working with Git / Gitlab.
- Motivation to tackle problems and questions independently by communicating with the experts in our team Slack.
- Fluent English skills (C1)
- Entrepreneurial spirit and self-starter attitude.
- Enthusiasm to learn about the NewSpace industry.

Don't apply if:

- You are not a team player
- You don't like to work on your own and bring in your own ideas

Benefits

At OroraTech you can expect a no bullshit, down to earth, yet high caliber work environment. You will be part of the OroraTech team - a dynamic, international, open-minded squad that is highly motivated to create impact. OroraTech can be your home base for a very long time and gives you the opportunity to grow on a professional and personal level. Other benefits include:

- Fame and glory for what you will have helped build
- Attractive office and lab in Munich
- A great remote culture, which allows you to be very flexible; if you prefer to work from sunny beaches or cool mountains from time to time, feel free - just be prepared to get some jealous messages from us on Slack or to receive even more awesome photos in return

If you apply: Please always include your CV, Cover letter and references. We value well-crafted motivation letters stating how you learned about OroraTech, why you think you would be a great addition to the team and why you want to work at a NewSpace startup. Please also list your earliest starting date and expected salary.

Contact us: apply@ororatech.com