Are you fascinated by space?
Do you wonder what is possible when academia and industry work together?
Would you like to join a team that makes systems made for space?

If the answer is yes, yes and yes, we would love to hear from you!

CubeSat – On-Board Computing Engineer

ARIS is a student initiative based at ETH Zürich (Dübendorf) and inspires students across Switzerland with opportunities to **put into practice what you have been studying** in theory by gaining **hands-on space engineering experience** and contribute to space engineering challenges through academic and industry collaborations.

ARIS' CubeSat mission will be the first demonstration of our capability to develop space-grade systems. This is an exciting and significant departure from ARIS' previous projects focused primarily on rocket technologies. By taking a step into the field of developing miniaturized satellites we introduce ARIS' first multi-year project. What makes this project so unique is the challenge to design and fit a complex, small scale system which can withstand and operate in an extremely harsh environment.

As an **On-Board Computing Engineer,** you will be responsible for the software of the CubeSat. Maintaining high quality standards through means such as code reviews as well as ensuring the electronics hardware make for additional key responsibilities. You will be designing PCBs, establishing a communication and data link, implementing on-board measurement systems, as well as mechanisms controlling the CubeSat.

To achieve our ambitious projects and continue our exciting growth, we are searching for a motivated **On-Board Computing Engineer**.

Tasks include:

- Defining the required software and hardware operations over the duration of its mission
- Selecting, and/or developing suitable hardware for data processing
- Writing high level code to control the top-level operations of the CubeSat.
- Writing low-level code and drivers to interface with electronic components.
- Working with other team members to integrate other CubeSat subsystems into the software architecture
- Engaging in code reviews
- Conducting hardware and software tests to ensure functional reliable performance.
- Using modern software development tools for version control and unit testing
- Tackle problems with ingenuity and perseverance

Expectations

From each of our team members we expect:

- spend 2-3 days a week on the project and be able to join team meetings and workshops at Switzerland Innovation Park in Dübendorf, ZH
- Be proactive and able to take responsibility
- Fail, get up and learn from it
- Take responsibility for your projects and tasks
- Work closely with the other engineering, marketing, and business teams within ARIS.

What do you get?

By participating in this unique challenge, you will:

- Get in contact with many sponsors from academia and industry
- Take initiative outside of the classroom and gain hands-on experience
- Establish and grow your network in industry and academia
- Be part of a friendly community, grow as a unit and build life-long friendships
- Kickstart your career!

Project start: August/September 2022
Duration: min. 2 semesters
Working hours: 2-3 days/week

Please be informed that your work will be entirely voluntary. As we are a student project, we do not offer any paid employment.

Any questions? Get in touch.

We look forward to hearing from you! Please submit a complete application, including CV. If you have any questions, please reach us on **hr@aris-space.ch** or **cubesat@aris-space.ch**.