Hardware Engineer
ARC Student Project - MARC Feeder - Volunteering Position

The Autonomous River Cleanup (ARC) is a student-led initiative supported by the Robotic Systems Lab with the goal of removing riverine waste. By joining the **MARC Feeder project**, you will contribute to ARC's next step, where we aim to design, build, and test an improved feeder system for riverine waste. The feeder moves the riverine waste from a waste collection point onto the conveyor belt of the robotic sorting container (MARC). Additionally, the feeder should do some presorting of large debris, e.g., large branches, and only let suitable waste items, such as PET bottles and aluminum cans, into the robotic sorting container.

Your role:
During your time at ARC, you will do the following:
- Familiarizing yourself with the robotic sorting container (MARC) and current feeder system
- Developing, building, and integrating an improved feeder for riverine waste on MARC
- Testing the new feeder system

Your skills and background:
Ideally, you already have the following skills or are eager to learn them:
- Basic skills in computer-aided design (CAD), e.g. NX, SolidWorks, etc.
- Familiarity with hardware design principles and product design
- Basic understanding of mechatronic systems and waterproofing techniques

You do not need to be an expert yet, but you are willing to become one!

Expectations:
As a team member, we expect you to:
- Be proactive and take responsibility for your work
- Participate in team meetings and workshops
- Take ownership of your projects and tasks
- Collaborate closely with your team

What do you receive?
By participating in this unique opportunity, you will:
- Expand your knowledge and gain hands-on experience on a project outside of the classroom
- Establish and grow your professional network and engage with people from academia
- Be part of a friendly community, grow as a unit, and build friendships
- Do something meaningful for our natural environment
- Receive support and guidance from current team members
- Kickstart your career!

Project start: as soon as possible
Duration: 2 semesters
Working hours: 8 hours/week
Target group: Bachelor's and master's students
Location: Zurich

Please be informed that your work, as part of a student project, will be entirely voluntary and does not offer any payment. However, you will be able to prove your practical experience in your CV and have access to a vast infrastructure to realize your ideas.

Interested? Any questions? Get in touch!
We look forward to hearing from you! For the application, please specify why you are interested in the project and include your CV. Please reach us via our arc@ethz.ch.

🚀 SHupported by the Robotic Systems Lab and ETH Student Project House