Robotics Engineer

ARC Student Project - MARC Planning Pipeline - 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 project**, you will contribute to ARC's current developments, where we aim to improve the software pipeline of our Mobile Autonomous Sorting Container (MARC). This task's goal is to make the sorting planer position-dependent instead of time-dependent by using the encoder readings of the conveyor belt motor. With this approach, we want to increase the success rate of grasping waste items on the conveyor belt.

Your role:
During your time at ARC, you will do the following:
- Familiarizing yourself with the robotic sorting container and software pipeline
- Increasing the robustness of the sorting planer and robotic control pipeline
- Testing the new planning pipeline on-site at the robotic sorting container

Your skills and background:
Ideally, you already have the following skills or are eager to learn them:
- Familiarity with Python, ROS, and version control
- Experience in working with an existing code framework
- Basic understanding of planning and control for autonomous robots

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: Ideally July 2024
Duration: 1-2 semesters
Working hours: on average 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.

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