



Space Team Aachen

Airbrakes Engineer

Space Team Aachen Hybrid Rocket - STAHR

About Space Team Aachen

The Space Team Aachen is a space science association founded by students of the Aachen universities. Our team is formed of ambitious students from a variety of fields who share the fascination for space exploration. Our team designs, builds and flies experimental rockets and scientific experiments. We set high, challenging goals in order to reach our best performance. We believe in equality and stand for the exchange of our aggregated knowledge.

Your responsibilities

Space Team Aachen is currently developing a hybrid rocket aiming to reach a 10km altitude, using N₂O as oxidiser and a paraffin-based fuel.

As part of the Mechanical Systems team, you will be assisting with developing the airbrakes for STAHR that control its apogee altitude during ascent. Your tasks will include (or be divided amongst members):

1. Calculating the drag forces and designing an appropriate system for braking
2. Ensuring reliable deployment of brakes
3. Implementing a feedback-control system for braking using sensor inputs during flight
4. Simulating and testing the final system

Project begins: Immediately

Our requirements

- Student at RWTH or FH Aachen
- Understanding of mechanical design, expertise in CFD/FEM and drag forces would be preferred
- Preferred: experience in non-linear control systems, Python and C/C++
- Ability to take responsibility and structured way of working
- Fascination for rocket science
- Able to work in a team of students
- Knowledge of English and German

What do we offer

- Be a part of the technical team for the largest rocket project in Aachen
- Receive technical insights into various aspects of rocket development
- Work on a hands-on space project
- Have autonomy in responsibility
- Contact with experts in Aachen, DLR and industry
- See your project be built and launched in near future

Interested?

Send in your CV and a motivation letter to spaceteamaachen@gmail.com

