HOPPER GNC Engineer



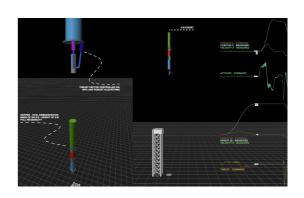
About Hopper

Hopper is one of Europe's most ambitious student rocketry projects. Our goal is to push the boundaries of student aerospace engineering by developing a throttling rocket engine, avionics modules, embedded software, ground systems, and more—all to demonstrate one of the first vertical landing rockets in Europe.

We are looking for passionate and motivated students to join our journey. Prior experience in rocketry is not required —curiosity, dedication, and a drive to solve technical challenges are what matter most.

Your Role

As a GNC Engineer, you will work on Hoppers guidance, navigation and control (GNC) systems. These systems and underlying algorithms are essential to achieve a stable flight and safely track a desired trajectory. You will build on recent advancements and further extend our internal GNC capabilities. This will include the refinement of control algorithms for optimal performance, implementation of filters for sensor fusion and state estimation, as well as further advancing our internal simulation environments to test algorithms pre-flight. Taking part in test and flight campaigns will allow you to collect data and iterate on the algorithms performance. Ultimately your work will contribute to the core capability of the Hopper to demonstrate vertical take-off and landing as one of the first student teams.



Requirements

- Enrolled at RWTH Aachen University or FH Aachen.
- Highly motivated and eager to learn.
- Independent problem solver with strong teamwork skills.
- · Fluent in German or English.
- Minimum of 8 hours per week

Technical Skills (preferred)

- Understanding of control and navigation algorithms
- Experience in Matlab/Simulink and/or C is helpful
- Research on control and navigation topics to work out new designs

What You'll Gain

- Be part of building Europe's largest rocket hopper.
- Apply your academic knowledge in real engineering challenges.
- Join rocket test campaigns and see your work in action.
- Build a strong network in the space industry.
- Develop practical experience with cutting-edge technology.

Application Steps

If you are interested in applying, please submit the following documents to application@sta.rwth-aachen.de:

- 1. CV: An up-to-date CV outlining your academic background, experience and relevant skills.
- 2. Motivational Letter: A short letter explaining your interest in the project, your qualifications, and how your goals align with our project.
- 3. Description of past engineering projects (if available): A document summarizing key engineering projects you have worked on, including your role, the project objectives and technologies used.

Please ensure all documents are in PDF format.

Step 1Step 2Step 3Step 4Step 5Application RecievedResume reviewShort Phone CallInterviewOffer!



Space Team Aachen e.V.

Email: application@sta.rwth-aachen.de Web: www.spaceteamaachen.de

Registergericht: Amtsgericht Aachen

Registernummer: 5991