AETHER

Design, build and Launch of a Re-entry CubeSat

Function:

Aero- & Thermodynamics engineer

One open vacancy

Aether's project

The Aether Student CubeSat team brings together young Belgian engineers who are passionate about space technology. We are designing a CubeSat: a nano-satellite small enough to hold in your hand. In the past decade, the CubeSat standard has enabled countless new innovations in the space industry, and we are determined to uphold this tradition! Aether is focusing on the area of re-entry: creating the technology that will allow future CubeSats to safely re-enter the atmosphere and land on Earth after carrying out their experiments in orbit. This will allow scientists to analyze samples and get even more results out of their experiments, and all this with the affordability and accessibility that come with the CubeSat platform!

Function description

We are seeking a dedicated Aero-Thermodynamics Engineer to join our advanced aerospace team. In this role, you will work with CFD tools such as ANSYS Fluent to simulate high-temperature gas flows over our CubeSat during its hypersonic re-entry. Your analyses will directly inform the design of our spacecraft, ensuring it withstands extreme thermal loads while maintaining structural integrity. You will also investigate transient descent regimes, collaborating closely with structural and materials departments to optimize the overall design. Additionally, you will contribute to the development and prototyping of a new nose cone design, which will be tested in a plasma wind tunnel facility.

What do you gain?

- A unique engineering experience within an exciting space mission.
- Create added value for your CV and the team.
- Improve your (soft) skills on many aspects.
- Be part of the team that will revolutionize the CubeSat platform.
- Connection to a wide network of aerospace companies.

Profile

- Minimum bachelor's degree.
- Knowledge of aero- & thermodynamics.
- Motivated team player.
- Analytical and problem-solving.

BONUS

- Knowledge of hypersonic flow.
- Experience with CFD software.
- Understanding high temperature gas dynamics.

aetherspace.be

Get in Touch

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