



HE Space is a successful international space company. For nearly 40 years, we have been supporting our customers with qualified experts in the field of engineering, science and administration. We are currently looking for a AOCS Engineer to support our customer in Luxemburg.

AOCS Engineer

Key Tasks and Responsibilities

You will have the following responsibilities:

- Continue to evolve spacecraft AOCS architecture including components and systems that provide both relative and absolute attitude measurements;
- Perform integration and test of spacecraft AOCS components and software for the spacecraft in the lab;
- Define Concept of Operation for the spacecraft attitude determination, control system and related ground systems;
- Interface with Systems Engineering team to define architecture and design based on spacecraft attitude determination and control systems performance;
- Perform analysis to determine spacecraft AOCS component performance requirements including performance characteristics (e.g. sizing, accuracy, sensor noise, reliability, etc.), redundancy, and fault detection, isolation and recovery options;
- Specify, evaluate, and select spacecraft attitude determination sensors and actuators, like rate sensors, magnetometers, sun sensors, horizon sensors, star trackers, reaction wheels and propulsion, etc.;
- Design and implement algorithms and software to support various pointing modes and attitude control scenarios. Software development include software components for use of off-the-shelves and newly-developed units, like COTS drivers and thruster selection logic, etc.;
- Design and plan payload testing configurations on the ground when testing spacecraft attitude determination and control system performance both in-lab and in-orbit;
- Support spacecraft integration, testing, and delivery to launch/spacecraft bus partners/vendors;
- Knowledge of Deep Space environment and interplanetary navigation;
- Develop and maintain technical documentation for spacecraft AOCS architecture definition, design, and development.

Skills & Experience

The key person shall have proven knowledge and hands-on experience in several of the following mandatory skills areas:

- Technical Master's degree (or equivalent) and/or professional high tech experience;
- More than three years of experience with CubeSat/spacecraft attitude determination and/or control systems;
- Recent participation in projects developing space hardware and software (preferably spacecraft attitude determination and/or control);

Passionate about people and passionate about space

- In-depth knowledge and hands-on experience with spacecraft attitude determination and control system components such as IMUs, star trackers, reaction wheels, and reaction control system;
- In-depth knowledge of spacecraft propulsion systems, propulsion system Concept of Operations, and flight guidance navigation and control systems and software is a major advantage;
- Programming proficiency in one or more programming languages is required (e.g. C, Python, etc.);
- Proficient in working with Linux based systems;
- Hands-on experience with programming microcontrollers is desired;
- Must be able to work independently and in a team environment;
- Guidance navigation and control (GNC) experience is considered a plus;
- Understanding asteroid space environment is a plus;
- Fluency in English is mandatory.

This job is located in **Luxemburg**. We welcome applicants who are available as soon as possible.

If you think you have what it takes for this job, please send your CV together with a letter of motivation (both in English and in Word) to Chiara Grossardi, by clicking on the button "Apply for this job" quoting job **LU-HP-4641**.

An exciting and dynamic international working environment awaits you!