

Internship offer

Mechanical engineer for antenna deployment system

Context:

The University Space Center of Montpellier (CSUM) is the French leader in the development and operation of nanosatellites developed by students. It has acquired in-depth competences in the field of design, manufacturing, testing and operation of nanosatellites and their subsystems, as well as in the area of space project management and product assurance in the framework of university space projects. The CSUM has an AIT (Assembly Integration and Test) Facility, a CDF (Concurrent Design Facility) and both UHF and S-band Ground Stations. The CSUM develops its own 1U to 12U CubeSat nanosatellite platforms with the support of the Van Allen Foundation and the French and European space agencies.

Internship description:

Objectives: CSUM is continuously developing its 1U, 3U, and now 12U platform platforms to integrate new concepts and technologies. Within this framework, the intern will contribute to the ongoing design of an antenna deployment system used for telemetry transmission and telecommand reception (TM/TC).

Mission:

The mechanical engineer intern will be responsible of the development of CAD models, including design and simulation.

Main activities related to your mission:

- Create and update mechanical parts in Solidworks
- Perform mechanical simulations of subassemblies
- Design and develop new ground support equipment
- Produce 3D-printing prototypes
- Ensure tractability of the development (logbook, reports, justification file)
- Collaborate with others interns and engineers

Level: 2nd year of Master Degree or equivalent.

Duration: 4 to 6 months



Skills:

- **Languages:** English – ability to discuss technical topics with experts and write technical documents.
- **CAO:** Proficiency with CAD software (Solidworks or equivalent)
- **Mechanical:** Shape Memory Alloy (SMA).
- **Documentation & Reporting:** Ability to produce clear technical reports and presentations
- **Enthusiasm for space**

Location: Centre Spatial Universitaire de Montpellier, Campus Saint-Priest, 34090 Montpellier, France.

Stipend: 4.35 euros/worked hours for duration between 308 and 924 hours, 35 hours/week.

Preferred starting date: From September 2026

Supervisor(s): Sébastien HESSE – Ground Station team Leader (project) and Allan MANENT – Mechanical and AIT Engineer (Technical).