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CSUM_M_HR_PROP_Internship_Proposal_Mechanical_GSE_for_ROB3A_2021
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INTERNSHIP OFFER

CONCEPTION AND MANUFACTURING OF 3U CUBESAT MECHANICAL GROUND SUPPORT EQUIPMENT

1 UNIVERSITY SPACE CENTER OF MONTPELLIER

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 and 3U CubeSat nanosatellite platforms with the support of the Van Allen Foundation and both the French and the European space agencies.

2 INTERNSHIP DESCRIPTION

In the frame of the AIT/AIV sequence of MEDITERANNEE ROBUSTA3A CubeSat, several models of the satellite are being manufactured and tested in the CSUM. These tests often require specifically developed ground support equipment (GSE), such as mechanical GSE that will be used for different applications: supports, stands, protections, test benches for center of mass and gravity, vibration and shocks facilities interfaces, etc...

The student will have to work alongside the AIT team in order design, specify and build these GSE in time for their use in the satellite Assembly and Test sequence.

The student will be in charge of verifying the compliancy of the GSE with the requirements of the project and the tests plans. She/he will test the GSE and be part of the tests involving it on the Structural of functional models of the satellite.

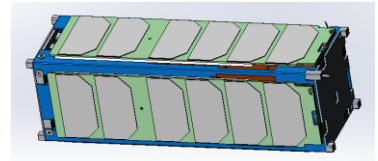


Figure 1: ROB3A CubeSat
CAD Model.

Skills/Languages: Solidworks (or equivalent), English Language, Writing and reading of technical documentation

Level: Master or Engineering School degrees

Location: CSUM, Montpellier, FRANCE

Preferred starting date: March 2021

Duration: 3-5 months

Supervisor, Function at CSUM: Tristan ALLAIN - System Engineer

Stipend: 3.90 euros/worked hours for duration between 308 and 924 hours, 35 hours/week.

3 CONTACT

Please upload your application at: <https://csu.edu.umontpellier.fr/en/job-offers-internship/>