

INTERNSHIP OFFER

CubeSat 3U Radiation Analysis

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

The student shall be in charge of (1) defining the expected radiation environment constraint by using OMERE software and (2) analyzing the designed 3U CubeSat in term of SEE and cumulative effects.

A CAD model in step format shall be provided to the student to import it into FASTRAD software for sectorial analysis. Radiation constraint maps and Radiation analysis report are the expected output of this internship. These docs shall allow system manager for evaluating the efficiency of current design and the need of additional shielding.



Figure 1: ROBUSTA-3A design.

Skills/Languages: Space engineering, Radiation analysis, English language

Level: Master 2

Location: Université of Montpellier – University Space Centre

Preferred starting date: 01/12/2019

Duration: 6 months

Supervisor, Function at CSUM: Muriel BERNARD, PA Manager

Stipend: 3.75 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/>