

INTERNSHIP OFFER

Emulation of Solar Panels and batteries

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

Context: For the ROB3A mission, the Electrical Power Subsystem (EPS) is responsible for energy harvesting, storing and distribution on the satellite. In the EPS, the Battery Management System (BMS) manages the batteries.

Description of the tasks: The student will help work on the emulation of the BMS and MPPT and to its connection to the simulation.



Figure 1: Logo of the ROB3A mission.

Skills/Languages:

- Experience with Software Development
- C
- Write documentation and deliver documents

Plus (not required):

- Git
- Matlab

Level: Licence

Location: CSUM Montpellier – Campus St Priest – Building 6

Duration: 2 months

Supervisor, Function at CSUM: Pablo Boizeau / Sara Vega Martinez

Stipend: 3.90 euros/worked hours if longer than 2 months, 35 hours/week.

3 CONTACT

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