

## NANOSATELLITE PASSIVE ADCS DESIGN AND IMPLEMENTATION

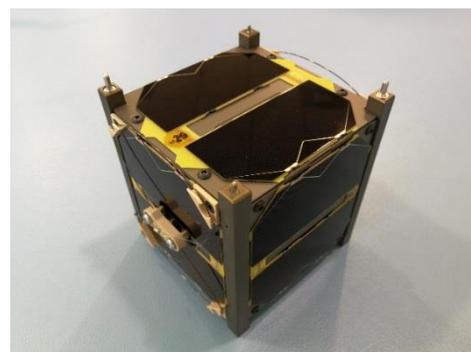
### Internship offer

### UNIVERSITY SPACE CENTER OF MONTPELLIER (CSUM)

The University Space Center of Montpellier 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 CSU 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.

### INTERNSHIP DESCRIPTION

The first mission will be to study bibliography provided by ESA experts in the frame of the Fly Your Satellite! programme regarding CubeSats magnetic fields and their effects on the satellite's orientation. You will then have to study the different technical solutions available to minimize risks related to magnetic fields, mainly an increase in spin rate. Once this is done, you will assess the compatibility of the solutions within the current design and timeframe of the nanosatellite missions. Throughout your internship, you will be in direct contact with both CSUM and ESA experts, and directly involved in the project's life. Your work will go to space!



Skills/Languages: English – being able to have a technical discussion with experts

Electromagnetic fields – intermediate level

PCB design (Eagle or equivalent)/EMC/Current loops knowledge is a big plus

Level: 3<sup>rd</sup> year of BSc, 1<sup>st</sup>/2<sup>nd</sup> year of MSc or equivalent

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

Preferred starting date: Position open immediately

Duration: 3 to 6 months

Supervisor, Function at CSUM: Laélien Rivière, System Engineer and 1U satellites manager

This internship is remunerated.

### CONTACT

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

