

# Full stack Python developer

## Job offer



## University Space Center of Montpellier (CSUM)

The CSUM has a recognized expertise in the field of design, development, testing and operation of nanosatellites and their subsystems, as well as in management and product assurance of university space projects.

With 25 full-time engineers, the CSUM has AIT (Assembly Integration and Tests) resources, a 200m<sup>2</sup> ISO8 clean room and an ISO5 tent, a CIC (Concurrent Engineering Center), a vacuum thermal chamber [-170°C; +150°C], a 58 kN vibrator and a VHF/UHF and S band transmission/reception ground station. It has developed its own 1U format nano-satellite platform technology ROBUSTA-1U, 3U, with the support of the Van Allen Foundation, French and European space agencies.

## COMETES project

CSUM and the Van Allen Foundation (FVA), a foundation of the University of Montpellier overseeing the management and financial support of CSUM, were awarded a call for projects on future skills and profession, alongside 25 other training and space industry stakeholders from the Grand Sud region of France (COMETES project).

The COMETES project (funded by the National Research Agency with €20M over five years) aims to foster the emergence of talent and accelerate the adaptation of training programs, from vocational certificates (CAP) to doctorates, to meet the skill needs of the space industry.



## Main mission

The CSUM operates more and more satellites in-flight. The volume of data produced is growing more and more. The CSUM already owns several tools for operations and test benches for mission with small amount of data. There is a need for update or rework of these applications. The applications and the tools are coded in Python. Currently we work with the frameworks Django and VueJS, and PostgreSQL database, notably.

The mission of the full stack developer will be to develop and maintain the different tools of the CSUM's ground segment : the control center and the test benches.

The full stack developer' job will be to gather the needs from the team, to develop, to test and to deploy and maintain the applications in use to test and operate, on ground and in flight, the CSUM satellites.

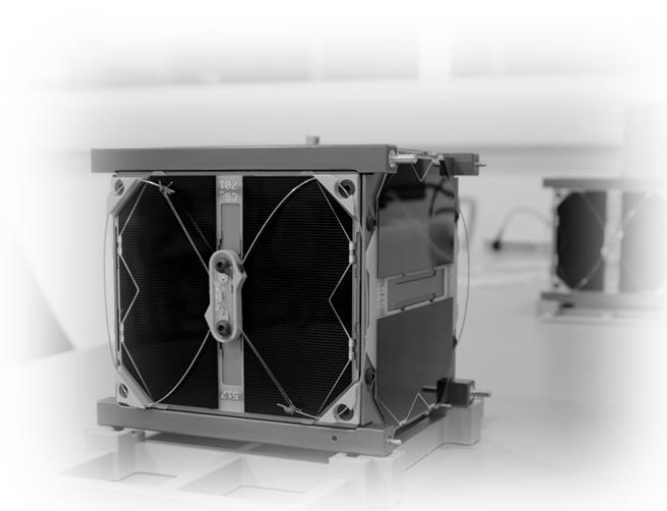
## **Skills & qualifications**

Main ones

- At least a Bachelor's Degree (3 years) in full stack development or a Master's Degree (5 years) in software development.
- Advanced skills in Python (library development, oriented-object programming, decorators)
- Advanced skills in data base and SQL
- Intermediate skills with Django or a similar framework
- Intermediate skills with VueJS or a similar framework
- Basic skills in Linux (command line : file browsing, reading/writing files)
- Basic skills with Git and GitHub or GitLab.
- Ability to collaborate with interdisciplinary teams.
- A high capacity to structure and follow test plans within complex and strict environments.
- Critical mind and capability to solve efficiently technical problems.
- English level: at least B2 level for reading, writing and speaking.
- Basic understanding of computer networks (OSI model, TCP/IP, CAN) and network protocols.

## **What can we offer?**

- Dynamic and challenging environment. Participating to the whole lifetime of a nanosatellite's project. Fully equipped facilities (mission control centre, workshop, ground station equipment, cleanroom, TVAC, shaker, workshop)
- Contract: 1 year (CDD)
- Salary: : 2130 € to 2645 € gross monthly
- Holydays: 30 to 46 days per year
- Possibility of partial remote work
- Preferred starting date: autumn 2025



## **How to apply?**

We accept young graduate. Send your resume and cover letter via the following form:

<https://csum.umontpellier.fr/en/jobs-job-offers/>