



**Flight Software Engineer / Embedded Systems**  
**Temporary position - 12 month [asap - Decembre 2022]**

**Context**

ISAE-SUPAERO is an international leader for higher education and research in aeronautics and space. The CREME project aims at designing and building a flight model of a 3U CubeSat nanosatellite. This CubeSat will carry a radiation monitor payload designed and developed by ONERA. The partners of this FEDER Region Occitanie project are ONERA, ISAE-SUPAERO, both founding members of the Toulouse University Space Center (CSUT) and project leaders, and 3 Small and Medium Enterprises (SMEs) in the space field (3D Plus, EREMS and TRAD). In the framework of this project, ISAE-SUPAERO is recruiting a Flight Software / Embedded Systems Engineer for the DCAS technical team.

**Job description**

The objective of this position is to participate in the development of the CREME flight software. This software is responsible for managing all the CREME satellite platform subsystems and contributes to guarantee the proper functioning of the associated payload.

In concrete terms, the tasks of the position will consist of designing, developing, integrating and validating the VHDL IPs required for the flight software and test equipment, developing the low layers of the drivers associated with the VHDL IPs, developing the application software layers specific to the mission and participating in the validation of the flight software. Particular attention will be paid to documentation, testing and validation.

The person recruited will work in collaboration with the technical teams of the institute and one of the challenges of the position is to ensure the sustainability of all this work for future projects of nanosatellite platform.

**Training and skills:**

- Master 2 or equivalent degree - Mastery of the VHDL and C
- Knowledge of communication buses (I2C, SpaceWire, RS422, etc.)
- Knowledge of Xilinx design tools
- Good interpersonal and communication skills
- Autonomy, versatility, rigor and ability to step back from one's activities

**Optional Strengths:**

- experience on the Zynq target
- experience on the XtratuM hypervisor
- experience in space engineering, design or development on CubeSat projects.

**Salary and benefits**

The proposed salary ranges from 33 000 to 39 000 € gross per year (index of the civil service 590 to 700) depending on experience. The work week is 40 hours, and the agent has 25 days of annual leave, 9 days of RTT, plus 20 days imposed by the by the establishment. Remote work is possible up to 1 floating day per week.

**Application**

Please indicate "[creme] application - Flight Software Engineer" in the subject line of the email, and attach your resume and a cover letter if you wish to apply. Put in recipient the two contacts:

Marc Justicia : [marc.justicia-mayoral@isae-supero.fr](mailto:marc.justicia-mayoral@isae-supero.fr)

Thibault Gateau : [thibault.gateau@isae.fr](mailto:thibault.gateau@isae.fr)