

IGOSat Project

Internship Proposal - Fall 2018

Electronic Design and Tests Engineer for IGOSat

Skills, Keywords : Electronic, microcontroler, KiCad, electronic validation, embedded software, satellite.

Level Wanted : 4th year, master degree **Duration :** 4 to 6 months **Stipend :** > 500 € / mois

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Project Description :

The Laboratory of Excellence (LabEx) UnivEarthS, set up by laboratories AIM (Astrophysique et Interactions Multi-Echelles), APC (AstroParticule et Cosmologie) and IPGP (Institut de Physique du Globe de Paris) from Paris Diderot University, is carrying carrying transverse projects between those 3 laboratories.

Using the strong involvment of those laboratories in numerous space experiments and instrumentation, an educational nanosatellite project has begun in 2013, with the financial and technical support from CNES (Centre National d'Etudes Spatiales) and the Space Campus of Paris Diderot University.

More specifically, the project is to develop a scientific 3U CubeSat, and launch it in 2019. The satellite will carry 2 payloads, one to study the Ionosphere and one to study the radiation belt.

Internship description:

The purpose of the internship is to design the electronic boards (PCB) of a 3U CubeSat. A large part of the satellite is home made and some prototypes have already been done for each sub-systems and currently integrated within the flat-sat. The rôle of the student will be to finalize the design and test the existing PCB toward an engineering and qualified model (with functions and performances validated). Moreover, relevant documentation have to be done, as well as a presentation in front of experts from the French Space Agency (CNES).

Within a team of students, engineers and scientists, the student need to be able to work autonomously as well as part of a team, have a sense of rigor especially in writing presentation, and already a global vision of information transmission. Experience with KiCad and sub-contractors for realization is a strong asset for this intership.

This internship is a good opportunity to address numerous points of space engineering.

Website: <http://www.igosat.fr>