Research engineer position: Electronic engineer

The project QlevEr Sat is developed by the CSUG and supported by Teledyne-E2V, to test on an Earth observation imager and a dedicated processor, an AI layer for the detection of various Earth phenomena as flooding, wild fire, traffic monitoring and so on. Such an architecture allow to drastically reduce the amount of data transmitted to the ground.

The imager will allow to have a ground based resolution of 10 m with a swath of 18 km.

It will be embedded on a cubesat (Target 3U).

The AI development will be driven by the MIAI institute and included in the AI for Earth observation program driven by Jocelyn Chanussot.

The project will be developed in two main phases, the first one in 2020 consisting to the phases 0/A/B regarding the space projects development phases.

The position consists to design the electronic cards which will be adapted on both the imaging detector (Proximity electronics) and the mother card for the processor.

The engineers will be included in the electronic pool of the CSUG (2 pers in 2020) and will work in collaboration with the CEDMS of the IUT1 and if needed with the CIME technological plateform..

The precise tasks will be

- Design if the CMOS proximity electronic
- Design of the processor motherboard card
- Design of the interfaces between the processor and the imager
- Supervise the assembly of the cards
- Supervise the dedicated tests.

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Design and built a representative engineering model in collaboration with the optical team.

Level: PhD or Electronic engineer. Knowledge in space electronics will be appreciated. Young engineers, (just leaving engineer school or just defending their PhD) are accepted.

English: Mandatory. French speakers will be appreciated.

Duration: One year contract. Renewable.

Applications should include:

- - a cover letter
- - a curriculum vitae with list of publications
- - a statement of current and future interests (up to 3 pages)

The application, merged into a single pdf file, should be sent by email to csug-contact@univ-grenoble-alpes.fr and Mathieu Barthelemy (mathieu.barthelemy@univ-grenoble-alpes.fr). The applicant should also provide the names and contact details of several professional references who could be contacted.

The contract will be for 12 month. The starting date of the appointment is as soon as possible from March 9th .
Informal enquiries are welcome and should be sent to the email address below.

Contact: Mathieu Barthélemy, director of the CSUG (mathieu.barthelemy@univ-grenoble- alpes.fr)