Unique, exciting Master thesis project ("TFE")!
Academic year 2016-2017

Become a member of the new OUFTI-2 student team building ULg's next CubeSat in one year!
We offer several projects, each concerning a specific subsystem of OUFTI-2

OUFTI-2's on-board computer (OBC) software:
design, implementation, and tests

Introduction
OUFTI-2 is the new ULg CubeSat (1 kg, 1 liter, 1 Watt) that will allow D-STAR amateur-radio ("ham") telecommunications, just as for OUFTI-1. The new nanosatellite and its subsystems will be designed totally from scratch, using the experience gained, and lessons learned, through OUFTI-1.

Your project!
• You and the team will conceive the architecture of OUFTI-2.
• You will design, build, and test the completely new, robust software that will run on a pair of redundant OBCs (most likely), which you will help to select. These OBCs and their software must interact with all other subsystems and handle the contact with the existing ground stations via telecommands & telemetry. Your software will ultimately run on a pair of 10x10 cm OBC cards (produced by others) working in perfect harmony with the other subsystems of the satellite.

Benefits for you
• Work with people who have built, from scratch, a complete ground & space satellite system, with its CubeSat reaching orbit alive!
• Get privileged access to the European Space Agency (ESA) and their training, including at its brand-new learning center in Redu, Belgium.
• Get - if interested, and with our guidance - a ham-radio license (and your own call-sign), allowing you to use our two ground stations and our mobile transceivers, transmitting up to 550 Watts of radio power!
• Gain international visibility by attending conferences (when warranted).

Your profile
• Computer science, software engineering, electrical/electronics engineering, engineering physics, or equivalent.

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Don't miss this once-in-a-lifetime opportunity!