2018-00246 - Internship in Mechatronic “Design of robots for archaeology”

Contract type : Internship agreement
Level of qualifications required : Graduate degree or equivalent
Function : Internship Engineering

About Inria
Inria, the French National Institute for computer science and applied mathematics, promotes “scientific excellence for technology transfer and society”. Graduates from the world's top universities, Inria's 2,700 employees rise to the challenges of digital sciences. With its open, agile model, Inria is able to explore original approaches with its partners in industry and academia and provide an efficient response to the multidisciplinary and application challenges of the digital transformation. Inria is the source of many innovations that add value and create jobs.

Context
We are collaborating with the HIP institute to develop novel robotic approaches for archaeology. The objective of this internship is to help us to design a new centimeter scale robot for minimally invasive exploration.

http://www.hip.institute/

Assignment
The intern will work on some sub-parts of the system to be determined, depending on the current state of the project.

Main activities
- search and develop innovative mechanical solutions for different requirements of the robot;
- evaluate the performance, by making prototypes combining different manufacturing methods, like high resolution 3D printing and conventional manufacturing (CNC milling).

Skills
- Good mechanical design with SolidWorks (Design, Drawing, Simulation, FEM)
- 3D printing and conventional manufacturing
- General electronic knowledge
- Arduino programming (optional)

Benefits package
- Subsidised catering service
- Partially-reimbursed public transport

General Information
- Theme/Domain : Robotics and Smart environments
- IT Technical and production engineering (BAP E)
- Town/city : Villers-lès-Nancy
- Inria Center : CRI Nancy - Grand Est
- Starting date : 3/5/18
- Duration of contract : 6 months
- Deadline to apply : 2/28/18

Contacts
- Inria Team : LARSEN
- Recruiter : Renaud Lucien / lucien.renaud@inria.fr

The keys to success
- Student in Engineer school or DUT specialized in mechanics
- Proactive
- Meticulous and exigent (soldering, assembling small parts)
- Good communication skills in English

Conditions for application
- Defence Security:
This position is likely to be situated in a restricted area (ZRR), as defined in Decree No. 2011-1425 relating to the protection of national scientific and technical potential (PPST). Authorisation to enter an area is granted by the director of the unit, following a favourable Ministerial decision, as defined in the decree of 3 July 2012 relating to the PPST. An unfavourable Ministerial decision in respect of a position situated in a ZRR would result in the cancellation of the appointment.

Recruitment Policy:
As part of its diversity policy, all Inria positions are accessible to people with disabilities.

Warning: you must enter your e-mail address in order to save your application to Inria. Applications must be submitted online on the Inria website. Processing of applications sent from other channels is not guaranteed.