



THE INSTITUTE OF INTELLIGENT SYSTEMS AND ROBOTICS*

JOB OFFER

Robotics Engineer

Project framework:

As part of the ANR i-Gait project, two parts were independently realized:

- A tactile feedback to actively reduce the postural sway of a person. This tactile feedback has been realized with a 3D printed handle including a vibrotactile actuator and using large amplifiers.
- A robotic cane controlled by a Beaglebone card and whose handle is not equipped with the tactile feedback system.

Mission:

The mission entrusted to the hired person will be to:

- Redesign a cane handle in 3D printing resistant to the efforts applied by the user,
- Include a commercial vibrotactile actuator to this handle,
- Replace the bulky amplifiers by amplifiers of a size compatible with the electronic part of the cane,
- Integrate on the Beaglebone controller the code necessary to activate the vibrotactile actuator.

Desired profile:

A young graduate of an engineering school or holder of a Master 2 in robotics.

Required skills:

- C/C++ programming skills
- Skills in mechanical design and 3D printing
- A strong taste for experimental work.

- **Duration of the contract:** 6 months
- **Expected date of employment:** as soon as possible
- **Location of the activity:** In the ISIR laboratory (Institute of Intelligent Systems and Robotics), on the Pierre and Marie Curie Campus of Sorbonne University, in Paris.
- **Contact:** Send a CV including the names of two referees to Wael BACHTA at the following address: wael.bachta@sorbonne-universite.fr

**The Institute of Intelligent Systems and Robotics (Isir) is a Joint Research Unit (UMR7222) under the supervision of [Sorbonne University](#), [The French National Centre for Scientific Research \(CNRS\)](#) and [Inserm](#) (ERL-U1150). This multidisciplinary research laboratory brings together researchers and teacher-researchers from different disciplines of Engineering and Information Sciences as well as Life Sciences.*