MASTER (M1 - M2) INTERNSHIP In Cardiac Imaging

Internship factsheet

THE INSTITUTION

IHU LIRYC – Electrophysiology and Heart Modeling Institute – is a unique institute distinguished for its expertise in heart rhythm disorders with a medley of world-renowned experts working in various fields (clinical, imaging, modeling, AI, computer science, …). The research performed over the years at LIRYC has created a dynamic and unique intellectual atmosphere where scientists can conduct cutting-edge research with the sole goal of improving cardiac patients care.

INTERNSHIP DURATION

The position is available immediately and for the expected duration of 4 to 6 months. The research project will be in strong collaboration with the Centre Hospitalier Universitaire (CHU) of Bordeaux and industrial partners, including Siemens Healthineers.

REQUIREMENTS

Candidates must fulfil the following:

- Must have completed a bachelor's degree in the fields of medical imaging, computer science, or engineering.
- Computer programming skills are a requirement (Matlab, C/C++, Python).
- Highly motivated, well-organised, and eager to learn in a multidisciplinary and innovation driven environment.

Project Description

The imaging team at IHU-LIRYC has recently developed a new technology enabling the first-ever coloured representation of myocardial scarring using cardiac magnetic resonance imaging. To push its clinical acceptance, a set of image processing algorithms will need to be implemented, optimized, and validated on our clinical MRI scanners. This will require the use of C/C++ libraries (e.g., ITK, MKL) and artificial intelligence-based tools to perform image segmentation, object localisation, image registration, and radiomics-based features extraction.

To apply: Should you be interested, please submit a CV to Aurelien Bustin, PhD (aurelien.bustin@ihu-liryc.fr)
This internship is part of the ANR JCJC HEARTFACT – AAPG 2021.