



Research Engineer for medical image processing technology transfer @ Telecom Paris, Institut Polytechnique de Paris (France)

Laboratory: Department Image-Data-Signal, LTCl, Telecom Paris
Duration: 1 year

Contact: elsa.angelini@telecom-paris.fr

Deadline for application: 2021-12-20 - Please email application including CV+ 1-page personal statement with email Subject "Application IPP-Valo-MedImaging"

Context:

This 1-year full-time position is funded by a technology transfer grant to mature a patented technology performing medical image harmonisation for monitoring longitudinal evolutions of anatomical lesions (e.g. tumors).

This position will provide great opportunities to explore new skills - depending on personal interests - in: testing statistical and deep learning methods to measure the impact of the image harmonization technology, interacting with international collaborators (USA, UK), participate in some teaching, co-supervising MSc interns.

This is an excellent opportunity for a MSc student willing to experience working in an academic research environment prior to embark in a PhD, or for a research engineer to get familiar with a novel domain. Institut Polytechnique de Paris is composed of 5 prestigious engineering schools (including Polytechnique and Telecom Paris), co-localised in Palaiseau, and offers an exceptional interdisciplinary environment around technological education and research.

Topic:

The post holder will be in charge of transferring a set of research-quality codes in a self-contained package usable in service mode. The tasks will involve some re-coding in Python, validating replication of results on previous use-cases, packaging for easy maintenance and robust usage on large pilot studies and then working on extension of the method's parameterisation to new use-cases, exploiting cohorts of images for various clinical applications.

The post holder will also be in charge of contributing to the transfer strategy components, by reviewing the recent literature on existing approaches and proposing options for a sustainable technological transfer model. This part will be performed in collaboration with the Technology Transfer teams of Telecom Paris and Institut Polytechnique de Paris.

The post holder will have access to large computing and storage resources from Telecom Paris.

While this position is geared toward the transfer of an existing technology, publications will be encouraged if the candidate expresses some interest.

Profile

MSc equivalent level or PhD.

Skills:

The candidate should have some basic background in image processing, computer vision as well as good programming skills in Python. Keen interest to work on medical images is required but previous experience in this field is not mandatory. The candidate should be willing to dedicate some time to interact with end-users such as clinicians. The work will also involve the review of business models.

Location

Telecom Paris, 91120 Palaiseau (south suburb of Paris). [<https://www.telecom-paris.fr>]