# Tenured faculty position at Telecom Paris, Institut Polytechnique de Paris
## « Image processing and remote sensing imaging»

Télécom Paris, a higher education and research institution in computer science and electrical engineering, is hiring an associate professor in the domain of image processing, modeling and understanding for remote sensing imaging in the IMAGES team (Image, Modeling, Analysis, Geometry and Synthesis) of IDS department (Image, Data, Signal) in the LTCI Laboratory (Information Processing and Communication).

## Research
The team aims at developing and extending its research activities in the domain of image processing and understanding for remote sensing applications (satellite or aerial imaging). Recently, the unprecedented availability of remote sensing data from heterogeneous sensors (multi- or hyper-spectral optic sensors, Synthetic Aperture Radar sensors) with improved spatial and temporal resolutions have raised new challenges in the fields of image restoration, classification, pattern recognition, fusion... The associated societal challenges are numerous: environmental monitoring, climate change survey, evaluation of renewable resources, activity monitoring, urban planning, etc. The team aims at developing or reinforcing the following topics: new sensor modeling and restoration (passive or active sensors), information extraction by sensor combination, temporal modeling and change monitoring, global scene understanding…

The applicant is expected to have competences and skills in image processing, a strong background in applied mathematics and computer sciences, and an experience in remote sensing imaging.
Methodological skills are expected as well, and they can cover one or several topics of interest for the team: physical modeling of sensors and environment, mathematical and statistical modeling of images, artificial intelligence and deep learning. The applicant is asked to propose a short research project presenting both methodological and remote sensing application topics he / she wants to develop.
The applicant will be encouraged to develop collaborations with team members, other academic teams and industrial partners, as well as with public institutions such as the CNES.

## Teaching
The applicant will participate in courses in image and signal processing and computer vision either in the first year of engineer program (basics in signal and image processing), or master level (basic and advanced courses in image processing and computer vision, and remote sensing imaging), or in the life-long learning programs. The applicant may also participate in courses in computer science, applied mathematics or physics, depending on his / her profile. The candidate will also participate in student project supervision and teach in joint Master degrees with partner universities.

## Skills

The candidate should hold a PhD degree in image processing, with an experience in remote sensing imaging and a strong background in applied mathematics and computer science.

Skills in one or several of the following domains are recommended: mathematical or physical modeling of sensors and acquisition systems, artificial intelligence and deep learning, statistical modeling.

A post-doctorate or international experience will be appreciated. An experience in teaching is recommended.

## Other skills

Relational skills, team player.

Pedagogical skills.

Capacity of developing academic and industrial collaborations.

Languages: English; French, or willing to learn French within 1-2 years.

## Context

Telecom Paris is one of the best French schools for digital sciences, technologies and usages with excellent students and research teams, member of Institut Polytechnique de Paris. The IMAGES team covers the whole image processing chain with skills ranging from mathematical modeling of the sensors to spatial reasoning and artificial intelligence including different levels of processing (restoration, feature extraction, pattern recognition, 3D…). It leads numerous academic and industrial collaborations. The position will be located in Palaiseau and is a permanent position.

## Application

The candidate must send to the human resources service (recrutement@telecom-paris.fr) and to the contact person of the team (florence.tupin@telecom-paris.fr) the following documents:

- A detailed curriculum vitae
- A letter of motivation
- A document detailing her/his experience in research and teaching
- The reports on the PhD document and the PhD defense
- A research and teaching project (maximum length: 3 pages)
- Her/his three major publications
- The names, addresses and electronic addresses of two highly qualified faculty members able to make recommendations on the applicant (one of them should not have published with the candidate)
- If relevant, a link to a web page with additional information (demonstrations, course material, complete publications…)

## Contacts

Florence Tupin florence.tupin@telecom-paris.fr, Isabelle Bloch isabelle.bloch@telecom-paris.fr

## Important dates

Deadline for applications: March, 1st, 2020.

Interview of selected candidates: April at Télécom Paris

Position start: September 2020

## Useful links

IMAGES team: https://images.telecom-paristech.fr/

IDS:https://www.telecom-paris.fr/en/the-school/teaching-research-departments/image-data-signal

LTCI laboratory: https://www.telecom-paris.fr/en/research/laboratories/information-processing-and-communication-laboratory-ltci/

Télécom Paris: https://www.telecom-paris.fr/en/home

Institut Polytechnique de Paris https://www.ip-paris.fr/en/home-en/