

## JOB SPECIFICATION FOR CALL FOR APPLICATIONS

**Date of update:** February 2020

**Job title:** Assistant Professor Applied optimization, learning and AI and network science

**Location:** Palaiseau and Evry - FRANCE

**Entity / Service:** Télécom SudParis / Wireless Networks and Multimedia Services Department (RS2M)

**Position of supervisor:** Head of department (RS2M)

**Categories or professions of agents who can apply:** II - C

**Category and job occupation in IMT:** II - C

**Category in the public service:** A

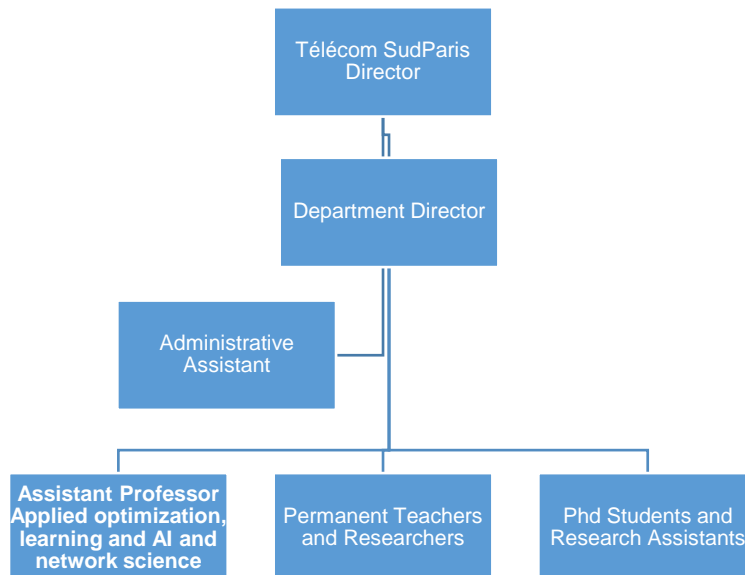
Permanent contract

### ABOUT TELECOM SUDPARIS

Telecom SudParis is a public graduate school for engineering, which has been recognized on the highest level in the domain of digital technology. The quality of its courses is founded on the scientific excellence of its faculty and on teaching techniques that emphasize project management, innovation and intercultural understanding. Telecom SudParis is part of the Institut Mines-Telecom, the number one group of engineering schools in France, under the supervision of the Minister for Industry. Telecom SudParis with Ecole Polytechnique, ENSTA Paris, ENSAE Paris and Telecom Paris are co-founders of the Institut Polytechnique de Paris, an institute of Science and Technology with an international vocation.

Its assets include: a personalized course, varied opportunities, the no.3 incubator in France, an ICT research center, an international campus shared with Institut Mines-Telecom Business School and over 60 student societies and clubs.

### POSITION IN THE ORGANIZATION:



## MISSIONS :

- Course work and curriculum design with teaching in optimization (combinatorial and convex), applied math, learning and artificial intelligence in our undergraduate and graduate programs (LMD), in co-op programs and in continuing education offered by Télécom SudParis and “Institut Polytechnique de Paris”.
- Application of the afore mentioned disciplines to networks and network science would be a plus to address future digital infrastructures, future networks and services and advanced applications
- Research and innovation in computer and telecommunications networks and services
- Active involvement in collaborative and externally funded research at the national, European and international levels including industrially funded contracts
- Active contribution to scientific excellence through top ranked publications and contributions to the institution’s outreach

## ACTIVITIES :

### Teaching

- Design and teaching of courses (formal courses and practical work) in optimization, applied math, machine learning and artificial intelligence and their application to vertical industries in general and to networks in particular with emphasis on network science development
- Establish and coordinate educational teams responsible for the university’s education programs and curricula in the afore mentioned disciplines and fields
- Advise students at undergraduate and graduate levels including senior projects, internships with industry, supervise master and doctoral theses.
- Participate in the enrolment and recruiting process of new students (entry exams, applicant interviews for the engineering, master and doctoral programs)

### Research

- Conduct leading and outstanding fundamental and applied research in the desired area of specialization including: optimization (combinatorial and convex), applied math, machine learning and artificial intelligence as a central activity and applications to networks and networks science as a (highly desired) secondary activity

- Advise and manage undergraduate and graduate students (in the undergraduate, master and doctoral programs)
- Ability to establish and manage scientifically and financially new collaborative projects involving academic and industrial partners in national, European and international contracts
- Exceptional communication skills, financial acumen and the potential to fundraise are essential.
- Proven scientific record and ability to publish in top ranked journals and international conferences expected in optimization, applied math and artificial intelligence with application to networks and network science

## **TRAINING AND SKILLS:**

### **Required education and professional experience:**

- Applicants must hold a Ph.D. in operations research (with emphasis on optimization – combinatorial and convex) and applied math and possibly in computer science or in a closely related field.
- Successful candidates must have a strong commitment to high quality research and teaching at undergraduate and graduate levels, as well as service.
- Applicants should have demonstrated an excellent record of research publications, in securing external funding (for senior ranks), and evidence of high-quality teaching. Experience in academic and industrial grants and active involvement in related projects expected
- Fluency in French and English are essential
- International and professional experience desired (industrial, academic, post-docs, sabbatical ...)
- Links and cooperation with international partners and scholars in the afore mentioned disciplines and fields and their applications to vertical industries, digital infrastructures and use for network science

### **Advanced education and experience expected in:**

- Theory and practice with a strong scientific background and in depth knowledge of optimization (combinatorial and convex), applied math in general, machine learning and artificial intelligence applied to networks and network science services
- Knowledge of computer and communications networks highly desired to address the needs of future digital infrastructures and advanced applications in terms of optimization, control and management

### **Abilities and Skills:**

- Autonomous, Self-Reliant, Cooperative, Dependable, Strong team leadership and teamwork abilities
- Good organization, analysis and synthesis skills
- Inter-personal skills and responsiveness

## **TO APPLY:**

### **Please send :**

- a motivation letter
  - a resume
  - a work notice about your past and future activities in teaching and research (the 2 types must be described with the same care for rigor and precision)
  - a list of main publications
  - names and mails of two qualified persons who can give an informed opinion on the application
- to**
- [recrutements@imtbs-tsp.eu](mailto:recrutements@imtbs-tsp.eu)

Or

- Télécom SudParis - HRD - 9 rue Charles Fourier - 91000 EVRY – France

Contact person: Djamel Zeghlache: [djamal.zeghlache@telecom-sudparis.eu](mailto:djamal.zeghlache@telecom-sudparis.eu)

Web Site: <https://www.telecom-sudparis.eu>

Information of the candidate on the processing of personal data can be found at :  
<https://bit.ly/2QeOZhI>