DISCIPLINE : Mathematics specialty probability - statistical

AFFILIATION : Ecole Nationale Supérieure Mines-Télécom Lille Douai (IMT Lille Douai)

Created by the merger of Mines Douai and Telecom Lille on January 1st, 2017, IMT Lille Douai is one of the largest graduate schools of engineering, north of Paris. It aims at training engineers and scientists of the future, with both industrial expertise and strong skills in digital technologies. Strategically located at the crossroad of Europe, one hour from Paris, one hour and a half from London and thirty minutes from Brussels, IMT Lille Douai intends to become a major player in industrial, digital and environmental transformations of the 21st century. Therefore, our school is building bridges between education, research, engineering and digital science.

Public establishment belonging to IMT (Institut Mines-Télécom), placed under the supervision of the Ministry of Industry, IMT Lille Douai has three main objectives: providing our students with ethically responsible engineering practice enabling them to solve 21st century issues, carrying out our R&D activities leading to outstanding innovations and supporting territorial development through innovation and entrepreneurship.

Located on two main campuses dedicated to research and education in Douai and Lille, IMT Lille Douai offers research facilities of almost 20,000m² in the following areas:

- Digital science
- Processes for industry and services
- Energy and Environment
- Process and Materials engineering applied to polymers, composites and civil engineering

IMT Lille-Douai aims at strengthening its Scientific Fundamentals Education Department both in education and research. Our school is also willing to develop cross-cutting activities in order to build bridges with other IMTLD Research and Innovation Centers (CERI) and remain in synch with the aeras of excellence of our school and of Institute Mines-Télécom. The central axes of the department are based on maths, physics and electronics, mainly during the first three years of the curriculum. The department is also involved in probabilities and statistical research. The successful candidate will evolve within a team consisting of 16 teachers-researchers, including 4 in mathematics.

The selection committee will pay specific attention to cross-cutting proposals allowing the connection between the different Centers and Departments. For more information, see: [www.imt-lille-douai.fr](http://www.imt-lille-douai.fr)

The required missions of the successful lecturer / assistant professor position candidate are described below.

**MISSIONS:**

Under the guidance of the Head of Scientific Fundamentals Education Department, the successful candidate will actively contribute to the teaching and research efforts of the Department:

**Teaching Missions and responsibilities :**

- significant contribution to the delivery of teaching programs (courses, tutorials, practical works) of undergraduate and graduate students in his/her field of expertise (analysis, algebra, statistics and probabilities). Some lectures can be delivered in English.
- Implement and engage innovative educational methods.
- Participate in pedagogical supervision (projects, internships, competition juries...).
Research and technology-transfer Missions:

- work effectively with other academics and supervise master/PhD students and post-docs in the domain of statistics and probability.
- initiate cross-cutting research with other IMTLD teams in information theory, signal and data processing or numerical integration. In this respect the selected candidate will be in charge of developing new probabilistic models to accurately describe the data and establish appropriate statistical inference methods.
- prepare the French diploma Accreditation to Supervise Research (“Habilitation à Diriger des Recherches (HDR)” in French).
- implement contractual research and incentive actions and facilitate knowledge transfer in partnership with economic actors.
- participate to the activities of regional, national and international scientific groups and organize scientific events.
- produce high quality scientific outputs: peer-review papers, patents, etc.
- undertake a scientific watch.
- attend working and discussion groups, international and national events (seminars, congresses..)

REQUIRED PROFILE:

The successful candidate must have strong scientific background and technical skills, allowing her/him to carry out the aforementioned missions.

She/He should:

- have solid scientific and technological background and significant experience in the analysis of probabilistic and statistical models. The candidate is expected to have preceding multidisciplinary collaborations in the thematic areas of IMTLD. Furthermore, Knowledges in partial differential equations, such as those used by the research teams (e.g. reaction diffusion, hydrodynamics, heat propagation equation..) would be appreciated.
- possess solid skills in programming (Matlab, R, Python..), numerical simulation and numerical statistics whatever his/her own specialization field is.
- have very good communication and teamwork skills.
- strong teaching experience is mandatory.
- Have a good command of English (both oral and written) and good communication and negotiation skills in order to:
  - demonstrate a marked integration into the international community, justify linguistic and cultural abilities to develop international training and research projects.
  - deliver online internet courses (MOOCS in English).

The candidate must hold a PhD degree in probability or statistics. This position is open to a candidate interested in teaching and research oriented towards information theory, signal processing, numerical integration applied to industrial issues. Work experience of post-doctoral research and of project management will be highly appreciated and substantial record of research output in high quality outlets, will be highly desirable. The candidate should show cultural awareness and an aptitude for multi-disciplinary projects.

The administrative residence is located in Lille but teaching delivering will be done in both main locations.
GENERAL INFORMATION:

The required document and for applying for this position can be obtained by contacting Human Resources Department (serviceconcoursdrh@imt-lille-douai.fr - Tél : +33 (0)3.27.71.25.36):

Ecole Nationale Supérieure Mines-Télécom Lille Douai (IMT Lille Douai) - Direction des Ressources Humaines Site de Douai - 941, rue Charles Bourseul - CS 10838 - 59508 DOUAI Cedex - France

Deadline date for submissions : 30/04/2020.

Eligibility Conditions : European Nationality Holders (European Union) at the candidature submission date and possessed of a PhD degree.

FOR MORE INFORMATION ABOUT THE MISSIONS, CONTACT:

Manuel Ardouin (Head of the Scientific Fundamentals department); Tél: +33(0)3 20 33 55 19, manuel.ardouin@imt-lille-douai.fr