

IMT ATLANTIQUE

recrutes a Lecturer (Maître de Conférences) in « Software Engineering and Distributed Systems » (tenured position)

http://www.imt-atlantique.fr

Recrutement date: 1 September 2024

Domain and research challenges

Digital infrastructures and the software that runs on them are now central to the societal transitions that our world must face. They enable communication among all levels of society, provide shared models of geo-distributed computations and storage, manage vital functions of our cities and industrial processes, and make it possible to reduce energy consumption and optimize its distribution.

The development, deployment and execution of these very complex IT systems are subject to major challenges relating to the definition, automation and efficiency of all its phases, in particular their correction. Additionally, the underlying distributed infrastructures, such as the Cloud to Internet of Things continuum, are becoming increasingly heterogeneous, requiring new services and applications to manage this heterogeneity. The major new challenges are, for example, the management of the diversity of resources, their dynamic (re)configuration, as well as optimizing their use from the system layers up to the higher application layers.

This position is fully aligned with the subjects of large-scale applications and infrastructures, notably in the context of the continuum from the Cloud to the Internet of Things as well as the Industry of the Future, which is at the heart of numerous national and European challenges. It is also thematically linked to IMT Atlantique's apprenticeship training for engineers specializing in digital transformation of industrial systems (FIT).

These themes are developed by the STACK team who are mainly investigating geo-distributed infrastructures and applications, the Cloud-IoT continuum and energy efficiency challenges, see https://www.inria.fr/en/stack.

The recruited person is expected to strongly help the team respond to the issues mentioned above. S/he should participate in the team's current projects (potentially in cooperation with other Software Engineering and Distributed Systems teams in the department), whether in research or industrial transfer of research, participate in setting up new projects on the most important challenges in the field and publish his work in the most renowned scientific journals and international conferences. S/he will also co-supervise doctoral students, postdoctoral students and interns at master's level.

Ecosystem and context

IMT Atlantique, internationally recognized for the quality of its research, is a leading technical university under the supervision of the Ministry of Industry and Digital Technology, ranked in the three main international rankings (THE, SHANGHAI, QS).

IMT Atlantique maintains privileged relationships with major national and international industrial partners, as well as with a dense network of SMEs, start-ups, and innovation networks. With 290 permanent staff, 2,200 students, including 300 doctoral students, IMT Atlantique produces 1,000 publications each year and raises 18€ million in research funds.

The position is open on the Nantes campus within the Automation, Production and Computing Department (DAPI), in the STACK team (Software Stack for Massively Geo-Distributed Infrastructure) that is part of the Nantes Digital Sciences Laboratory (Laboratoire des Sciences Numérique de Nantes - LS2N, UMR CNRS 6004) and a joint project-team with Inria's research center in Rennes.

Training

IMT Atlantique's training program has been recognized as one of the most innovative in higher education and research in France and offers wide possibilities for the development of innovative engineering programs and teaching approaches.

The recruited candidate will contribute to various training courses (full-time engineering studies or engineering-degree apprenticeship programs, master-level programs), both in their Software Engineering and Distributed Systems specialty as well as in common core courses or cross-functional activities related to the socio-economic world: tutoring projects/internships, defenses, support, etc. S/he will be invited to propose new projects, programs, and related educational methodologies, inspired by the advancement of science and supported by industrial requirements and partnerships, see:

https://www.imt-atlantique.fr/fr/formation

More specifically, the position aims to strengthen and develop degree apprenticeship training for engineers, specializing in the Digital Transformation of Industrial Systems (FIT). Interest in the pedagogical management of training programs, with a gradual assumption of responsibility in one of these apprenticeship training courses, is desirable.

Expected skills

The skills required and expected of candidates for the position of Lecturer (Maître de Conférence) at IMT Atlantique can be viewed at the following address:

https://www.imt-atlantique.fr/fr/l-ecole/offres-emploi?arg=7767 2 8158

In the case of this position, particular and complementary emphasis will be placed on the candidates' skills in software engineering and distributed systems.

Application form to download here:

https://institutminestelecom.recruitee.com/o/maitre-de-conferences-fh-en-genie-logiciel-systemes-repartis-2024/c/new , to be sent by e-mail accompanied by all required documents:

- CV + motivation letter
- Integration project relative to the 3 axes Education / Research / Transfer to industry and general public
- Photocopy of identity card or passport
- Photocopy of diplomas or a certificate of achievement
- Thesis defense report
- Reports of the two thesis reviewers
- Any other element that may support your application

Deadline for submitting applications: March 31st, 2024 (23:50 Paris Time)

Date of the recruitment interview: May 7th, 2024 Start date of the position: September 1st, 2024

Contacts

For further information, please contact:

- Alexandre Dolgui, Director of the API department, <u>Alexandre.Dolgui@imt-atlantique.fr</u>
- Adrien Lebre Head of STACK research group <u>Adrien.Lebre@inria.fr</u>
- David Lemoine, Deputy for Training and Education of the API department, David.Lemoine@imt-atlantique.fr