MINES
Nantes

ECOLE DES MINES DE NANTES

in partnership with **Inria**

hires **an associate professor**

on a **Mines Nantes – Inria chair** in
Software Engineering and Distributed Systems

Ecole des Mines de Nantes, an engineering school attached to the Institut Mines-Télécom, offers, via competitive selection, a position of

Associate professor on a Mines Nantes – Inria chair in Software Engineering and Distributed Systems.

This position, in partnership between Inria and Ecole des Mines de Nantes, is permanent, with state employee status, and equipped with an Inria chair for the first five years. This chair allows candidates with an excellent research record to:
- Limit teaching effort in favour of a stronger research activity.
- Benefit from a significant annual bonus payment during the chair duration.

Inria, the French National Institute for Computer Science and Applied Mathematics, promotes "scientific excellence for technology transfer and society". Inria's activities rely on project-teams combining skills at the heart of computer science and mathematics as well as know-how related to technology transfer and innovation. These project-teams, often joint with other actors of higher-education and research, allow Inria to push forward national and European priorities relying on local specificities and dynamics.

This shared chair between Inria and Ecole des Mines de Nantes aims to strengthen the current convergence between Software Engineering, Distributed Systems and Industrial Engineering toward the new paradigm of Cloud Manufacting. It also backs up the staffing of Ecole des Mines around this shared strategy.

Ecole des Mines de Nantes is a dynamic and ambitious public engineering school attached to Institut Mines-Télécom under the umbrella of the Ministry in charge of

Economy, Industry and the Digital Sector. It was created in 1991. Its official mission is to contribute to the economic development of the country, via training, research and technology transfer. It conducts excellent research, seen as a source of scientific knowledge and innovation answering major challenges of industry and society. It is currently involved in a merging project with another top engineering school, Télécom Bretagne.

The school has two areas of excellence: Information Sciences and Technologies (Computer Science, Information Systems, Automatic Control, Robotics, Production Systems, Logistics), and Energy and Environmental Sciences and Technologies (Energy Systems, Biofuels, Environmental Engineering, Fundamental Subatomic Physics and Nuclear Physics for Energy, Environment, Health and Society).

It is organized in four teaching and research departments, gathering about 140 researchers/teachers and researchers as well as 120 PhD students. It is also a partner of 4 joint research units (Subatech, GEPEA, IRCCyN, LINA) associating CNRS, Université of Nantes, Inria and other engineering schools.

Research at Ecole des Mines de Nantes leads to close to 200 peer-reviewed journal articles and to contracts amounting to about 9M€. Part of the work is performed in the context of 4 industrial teaching and research chairs.

The Department of Automation, Production and Computer Sciences hosts a hundred persons, including around forty permanent members in the fields of Automation, Robotics, Production Systems, Logistics and, for half of them, Computer Science. The three teams working on Computer Science are linked to Inria, as Inria Project teams for two of them, and as a research team of the Inria research centre Rennes – Bretagne Atlantique for the third one. The department is also associated to two joint research units (UMR) from INS2I (*Institut des Sciences de l'Information et de leurs Interactions*) in Nantes, LINA (*Laboratoire d'Informatique de Nantes Atlantique*) and IRCCyN (*Institut de Recherche en Communications et Cybernétique de Nantes*). These research units are about to merge into a new unit, LS2N (*Laboratoire des Sciences du Numérique de Nantes*), operating from 1 January 2017.

With respect to teaching, the department is responsible for five options of the generalist curriculum of Ecole des Mines, belonging to three domains, Software Engineering, Industrial Engineering and Cyber-Physical Systems. It is also responsible for an international Master in Management and Optimization of Supply Chains and Transport, as well as for an apprenticeship programme in Software Engineering.

Functions

The appointed candidate will participate in research tasks, transfer, and teaching activities. S/He will be able to take active part in the national, European, and international partnerships of the department.

Teaching

S/He will perform teaching activities consisting in courses, training sessions, and the supervision of engineering projects at all levels of the school's curricula (generalist engineering studies, apprenticeship programme, co-directed programmes, Master programmes, etc.). This may include taking part to teaching activities in English and MOOC development.

Research

The candidate will integrate the Software Engineering teaching and research group of the Department of Automation, Production and Computer Sciences. S/He will apply her/his work to the domain of Industry 4.0 and integrate one of the following two research groups:

- The Ascola team (http://www.emn.fr/x-info/ascola), which studies distributed infrastructures, notably for the Cloud and Green IT, and, more generally, the software engineering of complex systems.
- The AtlanMod team (http://www.emn.fr/x-info/atlanmod), which studies Model-Driven Engineering.

Both teams are part of LINA. Ascola is an Inria project-team and AtlanMod a team of the Inria research centre Rennes - Bretagne Atlantique.

Profile

The candidate must possess strong qualifications in the fields of software engineering or distributed systems. Furthermore, s/he must have shown:

- High recognition of her/his research activities in the scientific community (through publications in journals, conferences, working groups, ...).
- Substantial experience in the transfer of academic results to industrial practice and the setup of proposals of cooperative research projects.
- A first experience in the teaching of theoretic and practical computer science courses with applicability in industry.
- Fluent comprehension and communication in English.
- Excellent abilities in the integration of a research team and the development of human and soft skills.

Qualifications in the domain of new software architectures for industrial systems ("Cloud manufacturing", "Industry 4.0") are particularly appreciated.

Conditions

The candidate must be a citizen of a country from the European Union or from a country previously associated with the European Economic Area. S/He has to hold a doctoral degree or an equivalent accredited national diploma.
If the candidate does not speak French, s/he will demonstrate her/his abilities to reach a level in writing and speaking appropriate to teaching in French from the second year on.

Application Process

An application file must be obtained from the Human Resources Service (*Service des Ressources Humaines*):

Florence Moulet – Florence.Moulet@mines-nantes.fr - tel. : +33 2 51 85 83 63
Ecole des Mines de Nantes
4 rue Alfred Kastler – BP 20722
44307 Nantes CEDEX 3
FRANCE

and sent back by email by 12 May 2016.

The successful candidate is expected to effectively start 1 September 2016.

Further Information

For further information, contact:

Alexandre Dolgui (Alexandre.Dolgui@mines-nantes.fr), head of the Department of Automation, Production and Computer Sciences,

Mario Südholt (Mario.Sudholt@mines-nantes.fr), head of the Software Engineering group and the Ascola research team,

Gerson Sunyé (Gerson.Sunye@univ-nantes.fr), head of the AtlanMod research team.