

Deadline for registration of applications on Galaxie:

March 30, 2023 at 4 pm

JOB DESCRIPTION

Occupation : Maître de conférences (Assistant Professor)

CNU Section: 27

Department: Informatique (Computer Science)

Laboratory: UMR 6072Institut de Recherche en Informatique et Systèmes Aléatoires (IRISA)

Profile: Artificial Intelligence or Cybersecurity or Software Engineering

Teaching

Place: INSA Rennes

Departement: INFO (Computer Science)

Name of the head of the department : Jean-Louis Pazat

https://www.insa-rennes.fr/info.html

INSA Rennes

INSA Rennes, a founding member of the INSA Group, is the largest public engineering school in Brittany. It welcomes 2,200 students and apprentices and graduates more than 340 engineers, 60 masters students and 40 PhDs each year. Composed of 9 teaching departments, including 7 engineering specialities and one by apprenticeship, and supervised by 6 research laboratories, INSA employs around 500 public employees (research teachers, teachers, permanent and contractual BIATSS) and more than 400 temporary employees, notably from companies.

By positioning itself as an impact institute, INSA Rennes intends to be part of a positive metamorphosis aimed at building a fairer and more sustainable world for future generations. Being an engineering school today, producing skills and knowledge, requires more than ever to assert its responsibility; to anticipate the impact of inventions on individuals, society and the environment; to place itself at the service of a reasoned economy and of social progress, a source of well-being. More aware than ever of its social impact, the institute also intends to go further in the diversification of profiles and to provide each person with the keys to blossom and succeed in his or her studies, regardless of the educational investment he or she made before entering a prestigious school. The Impact Institute is above all a lever for transformation in the service of society and for meeting the challenges of sustainable development as defined by the United Nations.

This affirmed trajectory has been materialised by the adoption of its 2021-2026 strategic project, which can be consulted on the school's website: www.insa-rennes.fr

Education

Within INSA Rennes, the computer science department (INFO) hosts about 220 students, namely high-level engineers who are generalists in computer science. The training is based on a common core focused on software design and development, and options (Cloud, Data Science, Media & Interaction, Security) allowing students to choose a sub-field of computer science in which they wish to acquire additional skills.



The person recruited will join the Computer Science department of INSA Rennes. He/she will have the ability to teach in French and English in both fundamental domains of computer science and practical domains. He/she should also have a strong theoretical and practical competence in one of the fields identified in the research profile, namely: software engineering, machine learning (in particular deep learning) or cybersecurity, allowing him/her to teach in direct link with his/her research activities.

The recruited person will be in charge of theoretical and practical teaching activities as well as the supervision of student projects and internships within the Computer Science department. The recruited person is expected to be strongly involved in the coordination of teaching activities. Finally, the recruited person is also expected to potentially teach in other departments of INSA Rennes, especially in the undergraduate program.

Research

IRISA is today one of the largest French research laboratory (more than 850 people) in the field of computer science and information technologies. Structured into seven scientific departments, the laboratory is a research center of excellence with scientific priorities such as bioinformatics, systems security, new software architectures, virtual reality, big data analysis, and artificial intelligence.

Located in Rennes, Lannion, and Vannes, IRISA is at the heart of a rich regional ecosystem for research and innovation and is positioned as the reference in France with an internationally recognized expertise through numerous European contracts and international scientific collaborations.

Focused on the future of computer science and necessarily internationally oriented, IRISA is at the very heart of the digital transition of society and of innovation at the service of cybersecurity, health, environment and ecology, transport, robotics, energy, culture, and artificial intelligence.

IRISA is a joint-venture resulting from the collaboration between nine institutions, in alphabetical order: CentraleSupélec, CNRS, ENS Rennes, IMT Atlantique, Inria, INSA Rennes, Inserm, Université Bretagne Sud, Université de Rennes 1. From this collaboration is born a force that comes from women and men who give the best of themselves for fundamental and applied research, education, exchanges with other disciplines, transfer of know-how and technology, and scientific mediation.

IRISA benefits from a rich ecosystem combining governmental actors (DGA-MI, ANSSI, ComCyber...) and private actors (large companies, but also start-ups). It is structured through collaborative tools (Images & Networks Competitiveness Cluster, Cyber Excellence Cluster, IRT b<>com...), and it is strongly supported by local authorities. Joining IRISA means benefiting both from a laboratory that is undeniably open to the international scene and from a dense and dynamic ecosystem.

The candidate should have a strong research background in either cybersecurity, software engineering, or artificial intelligence, as evidenced by a list of international publications in topranked conferences and/or scientific journals.

In the field of **Artificial Intelligence**, the candidate is expected to have a recognized expertise in theoretical or applied Al. A strong background in machine learning—particularly deep learning—would be desirable. Competence in those techniques when applied to Natural Language Processing would be appreciated, but theoretical research in machine learning or in other applicative domains may also be considered. The person recruited will be involved in the animation of the artificial intelligence research community, both in Rennes and beyond.

In the field of **Cybersecurity**, the candidate is expected to have demonstrated expertise in systems security (software or hardware), network security, or privacy. The candidate is also expected to be





involved in the animation of the cybersecurity research community. In particular, the candidate should demonstrate his/her ability to be involved in local initiatives in which INSA Rennes is involved in (EUR Cyberschool, C-Cube, PEC...).

In the field of **Software Engineering**, the candidate is expected to have a well-known expertise in software engineering and more specifically in one or more of the following sub-fields: automated software engineering, modeling and programming languages, HCI engineering, software system verification and validation, analysis of software projects or codes, software evolution. The use of artificial intelligence techniques (in a broad sense: from logic and symbolic reasoning to machine learning/statistics) for software engineering is also a possible axis, although not mandatory, what is sought being above all an expertise around software.

The candidate will join a research team belonging to one of the departments of IRISA, with priority given to the following departments (no order) D1, D4, D6, or D7, or possibly D5. Particular attention will be paid to the integration project of the candidate. Involvement in the life of the laboratory is also expected, in particular through participation in collective scientific responsibilities, as well as involvement in local initiatives related to research activities.

International experience and recognition as well as involvement in the animation or evaluation of research at the national level would be appreciated.

Contacts

Jean-Louis Pazat (<u>jean-louis.pazat@insa-rennes.fr</u>) - Head of the department Gildas Avoine (<u>gildas.avoine@insa-rennes.fr</u>) - Head of the INSA site of IRISA Guillaume Gravier (<u>guillaume.gravier@irisa.fr</u>) - Head of IRISA Nelly Jutge (<u>nelly.jutge@insa-rennes.fr</u>) - Human resources

URL département : https://www.insa-rennes.fr/info.html

URL labo: https://www.irisa.fr



