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Offer #2025-08982

Post-Doctoral Research Visit F/M Multivariate and Streaming Time Series Management and Analysis

Contract type : Fixed-term contract

Level of qualifications required : PhD or equivalent

Fonction: Post-Doctoral Research Visit

Context

Main information:

- Topic: Multivariate and Streaming Time Series Management and Analysis
- Location: École Normale Supérieure (ENS), Paris, France
- Host Institution: Inria & ENS
- **Duration:** 2 years
- Project: Part of the i-Demo Cyberté collaboration with Scality

Project Description:

We are seeking a highly motivated **Postdoctoral Researcher** to join a dynamic team working at the intersection of **data management**, **streaming analytics**, and **machine learning** for **multivariate time series**. The position is hosted at ENS Paris, within a collaboration between **Inria** and **Scality** under the **i-Demo Cyberté** project.

Assignment

The overarching goal is to design and develop novel methods, models, and systems for **efficient management**, **indexing**, and **real-time analysis** of large-scale multivariate time series data, with applications in **cybersecurity**, **infrastructure monitoring**, and **intelligent storage systems**.

Main activities

- **Designing New Models and Algorithms:** Develop novel representations, indexing structures, and algorithms for managing and analyzing multivariate and streaming time series data.
- **Prototyping and Experimental Validation:** Implement research ideas into functional prototypes and evaluate their performance on real-world and synthetic datasets.
- **Collaborative Research and Publications:** Collaborate with academic and industry partners (including Scality) to publish results in top-tier conferences and journals.
- **System Integration and Benchmarking:** Work on integrating developed components into scalable systems and running comparative benchmarks against existing solutions.
- Mentoring and Team Involvement: Contribute to guiding interns and research engineers, participate in team meetings, and engage in project-related scientific discussions.

Skills

- Ph.D. in Computer Science, Data Science, or a related field
- Strong background in time series analysis, streaming systems, data management, or machine learning
- Experience with large-scale data platforms is a plus

Benefits package

- Subsidized meals
- Partial reimbursement of public transport costs
- Leave: 7 weeks of annual leave + 10 extra days off due to RTT (statutory reduction in working hours) + possibility of exceptional leave (sick children, moving home, etc.)
- Possibility of teleworking and flexible organization of working hours
- Professional equipment available (videoconferencing, loan of computer equipment, etc.)
- Social, cultural and sports events and activities
- Access to vocational training
- Social security coverage

General Information

- **Theme/Domain :** Data and Knowledge Representation and Processing Statistics (Big data) (BAP E)
- Town/city : Paris
- Inria Center : <u>Centre Inria de Paris</u>
- Starting date : 2025-10-01
- **Duration of contract :** 2 years
- **Deadline to apply :** 2025-08-04

Contacts

- Inria Team : <u>VALDA</u>
- Recruiter : Boniol Paul / paul.boniol@inria.fr

About Inria

Inria is the French national research institute dedicated to digital science and technology. It employs 2,600 people. Its 200 agile project teams, generally run jointly with academic partners, include more than 3,500 scientists and engineers working to meet the challenges of digital technology, often at the interface with other disciplines. The Institute also employs numerous talents in over forty different professions. 900 research support staff contribute to the preparation and development of scientific and entrepreneurial projects that have a worldwide impact.

Warning : you must enter your e-mail address in order to save your application to Inria. Applications must be submitted online on the Inria website. Processing of applications sent from other channels is not guaranteed.

Instruction to apply

Defence Security :

This position is likely to be situated in a restricted area (ZRR), as defined in Decree No. 2011-1425 relating to the protection of national scientific and technical potential (PPST). Authorisation to enter an area is granted by the director of the unit, following a favourable Ministerial decision, as defined in the decree of 3 July 2012 relating to the PPST. An unfavourable Ministerial decision in respect of a position situated in a ZRR would result in the cancellation of the appointment.

Recruitment Policy :

As part of its diversity policy, all Inria positions are accessible to people with disabilities.