



Offer #2024-07747

Post-Doctoral Research Visit F/M Post-doc in formal verification

Contract type : Fixed-term contract

Renewable contract : Yes

Level of qualifications required : PhD or equivalent

Fonction : Post-Doctoral Research Visit

About the research centre or Inria department

The Inria Centre at Rennes University is one of Inria's eight centres and has more than thirty research teams. The Inria Centre is a major and recognized player in the field of digital sciences. It is at the heart of a rich R&D and innovation ecosystem: highly innovative PMEs, large industrial groups, competitiveness clusters, research and higher education players, laboratories of excellence, technological research institute, etc.

Context

The research group belongs to a joint research center of Inria, CNRS, and Université de Rennes.

Assignment

We are looking to hire a post-doc for 12 months in the area of formal methods at Inria, Université de Rennes.

The research project will be about formal verification and testing of real-time systems using timed automata and techniques from game theory, reinforcement learning, temporal logics, automata learning etc.

More specifically, we will explore reinforcement learning techniques to develop black-box testing algorithms for timed automata.

We require from the candidate to have a strong background on theory of formal verification, a strong publication record, and if possible, experience or interest in implementing formal verification tools.

Main activities

Some of the papers related to the mentioned projects are listed below:

- <https://hal.science/hal-03777464>
<https://hal.science/hal-03947462>

Please apply on this website by sending a CV.

Benefits package

- Subsidized meals
- Partial reimbursement of public transport costs
- Possibility of teleworking (90 days per year) and flexible organization of working hours
- Partial payment of insurance costs

Remuneration

Monthly gross salary 2788€

General Information

- **Theme/Domain** : Proofs and Verification
- **Town/city** : Rennes
- **Inria Center** : [Centre Inria de l'Université de Rennes](#)
- **Starting date** : 2025-01-01
- **Duration of contract** : 1 year

- **Deadline to apply :** 2024-07-26

Contacts

- **Inria Team :** [DEVINE](#)
- **Recruiter :**
Jeron Thierry / thierry.jeron@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

Please submit online : your resume, cover letter and letters of recommendation eventually

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.