



Offer #2024-07379

Post-Doctoral Research Visit F/M In Quantum Computing Programming Languages

Contract type : Fixed-term contract

Level of qualifications required : PhD or equivalent

Fonction : Post-Doctoral Research Visit

Assignment

The candidate will work on quantum programming languages, for the sake of capturing resources leading to quantum advantages at the formal level and optimizing the usage of these resources to the limited hardware that is currently available. The candidate will develop type systems for these programming languages, allowing for proofs of correctness and the quantification of the quantum features that are at the root of the quantum advantage.

Main activities

The candidate will join the MOCQUA Inria EPC team of the LORIA, in Nancy, and work in close collaboration with the QuaCS team of the LMF laboratory in Saclay. More generally, they will work in collaboration with the consortium of EPIQ.

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 (after 6 months of employment) 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 :** Proofs and Verification
Scientific computing (BAP E)
- **Town/city :** Villers lès Nancy
- **Inria Center :** [Centre Inria de l'Université de Lorraine](#)
- **Starting date :** 2024-09-01
- **Duration of contract :** 3 years
- **Deadline to apply :** 2024-05-31

Contacts

- **Inria Team :** [MOCQUA](#)
- **Recruiter :**
Péchoux Romain / romain.pechoux@loria.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.