

Offre n°2025-08847

Research support engineer for debugger implementation (F/M)

Type de contrat : Fixed-term contract

Niveau de diplôme exigé : Graduate degree or equivalent

Fonction : Temporary scientific engineer

Niveau d'expérience souhaité : Up to 3 years

A propos du centre ou de la direction fonctionnelle

The Inria Centre at the University of Lille was set up in 2008 and employs 360 people, including 305 scientists in 15 research teams. Recognised for its strong involvement in the socio-economic development of the Hauts-de-France region, the Inria centre at the University of Lille maintains close relations with large companies and SMEs. By fostering synergies between researchers and industry, Inria contributes to the transfer of skills and expertise in the field of digital technologies and provides access to the best European and international research for the benefit of innovation and businesses, particularly in the region.

For more than 10 years, the Inria centre at the University of Lille has been located at the heart of Lille's university and scientific ecosystem, as well as at the heart of Frenchtech, with a technology showroom based on avenue de Bretagne in Lille, on the EuraTechnologies site of economic excellence dedicated to information and communication technologies (ICT).

Contexte et atouts du poste

The aim of EVREF is to support the remodularisation and development of modular object-oriented applications. We approach this objective from two complementary perspectives: reengineering and constructs for dynamic languages. In the context of

languages, we are revisiting concepts such as modules and composition; we are also working on a new generation of reflexive systems. We are experimenting with these programming constructs using Pharo, an object-oriented, reflexive and open source language. <http://rmod.inria.fr>

Mission confiée

You will join the EVREF team's debugging group, comprising 3 researchers and 2 PhD students.

You will be involved in two main projects. The first involves porting the WhyLine debugger algorithm (which asks ‘why/why not’ questions about the execution of a programme) to the Pharo environment, using its graphical and instrumentation tools. The second aims to enhance the Debugging Spy tool to capture more events in the Pharo environment and develop tools for analysing this data, in order to improve our instrumentation tools for empirical evaluations.

As part of these projects, you will be involved in the research work of doctoral students, as well as improving the Pharo debugger to support debugging research.

You'll be involved in team life (presenting your work to the team, taking part in Pharo sprints, and attending conferences on Pharo and software engineering when related to your assignments).

Principales activités

Main activities:

- software development of the Pharo debugger and its debugging and instrumentation tools
- porting the WhyLine debugger to Pharo
- development of tools to support research activities (infrastructure for the Pharo debugger, etc.)
- participation in debugging workshops
- taking part in meetings to design, discuss and reflect on the project and the debugger in general.

Additional activities:

- Participation in team life
- Participation in Pharo sprints
- Participation, where appropriate, in project-related writing (articles, chapters, blogs, etc.)

Compétences

Technical skills and level required: engineer (bac+5 university or school) in object-oriented software development

Languages: FR, EN

Interpersonal skills: clear communication, teamwork, initiative and autonomy

Additional skills: autonomy, initiative, adaptability

Avantages

- Subsidized catering
- Public transport partially reimbursed
- Leave: 7 weeks' annual leave + 10 days' RTT (full-time basis) + possibility of exceptional leave (e.g. sick children, moving house)
- Possibility of teleworking and flexible working hours
- Professional equipment available (videoconferencing, loan of IT equipment, etc.)
- Social, cultural and sporting benefits (Association de gestion des œuvres sociales d'Inria)
- Access to professional training
- Social security

Rémunération

Remuneration according to profile

Informations générales

- **Thème/Domaine :** Distributed programming and Software engineering
- **Ville :** Villeneuve d'Ascq
- **Centre Inria :** [Centre Inria de l'Université de Lille](#)
- **Date de prise de fonction souhaitée :** 2025-07-01
- **Durée de contrat :** 12 months
- **Date limite pour postuler :** 2025-05-31

Contacts

- **Équipe Inria :** [EVREF](#)
- **Recruteur :**
Costiou Steven / steven.costiou@inria.fr

A propos d'Inria

Inria est l'institut national de recherche dédié aux sciences et technologies du numérique. Il emploie 2600 personnes. Ses 215 équipes-projets agiles, en général communes avec des partenaires académiques, impliquent plus de 3900 scientifiques pour relever les défis du numérique, souvent à l'interface d'autres disciplines.

L'institut fait appel à de nombreux talents dans plus d'une quarantaine de métiers différents. 900 personnels d'appui à la recherche et à l'innovation contribuent à faire émerger et grandir des projets scientifiques ou entrepreneuriaux qui impactent le monde. Inria travaille avec de nombreuses entreprises et a accompagné la création de plus de 200 start-up. L'institut s'orce ainsi de répondre aux enjeux de la transformation numérique de la science, de la société et de l'économie.

L'essentiel pour réussir

- Object programming, Python and/or Pharo
- Familiarity with software production environments and tools (git, github, CI, etc.)
- Statistical analysis (statistical methods for empirical studies, R language, etc.)
- Teamwork (communication, presentations, mutual support, definition of common objectives)
- Ability to plan, anticipate and adapt a software production schedule

Attention: Les candidatures doivent être déposées en ligne sur le site Inria. Le traitement des candidatures adressées par d'autres canaux n'est pas garanti.

Consignes pour postuler

Please send your CV and cover letter

Sécurité défense :

Ce poste est susceptible d'être affecté dans une zone à régime restrictif (ZRR), telle que définie dans le décret n°2011-1425 relatif à la protection du potentiel scientifique et technique de la nation (PPST). L'autorisation d'accès à une zone est délivrée par le chef d'établissement, après avis ministériel favorable, tel que défini dans l'arrêté du 03 juillet 2012, relatif à la PPST. Un avis ministériel défavorable pour un poste affecté dans une ZRR aurait pour conséquence l'annulation du recrutement.

Politique de recrutement :

Dans le cadre de sa politique diversité, tous les postes Inria sont accessibles aux personnes en situation de handicap.