The goal of this Postdoc is to work on high level IDE on one or more of the following topics:

- Assignments
- Mission confiée
- worldwide and an industrial consortium
- reflective, object-oriented language
- reflective systems. We experiment with these programming constructs using Pharo, an open-source,
- language concepts such as modules and composition; we are also working on a new generation of
- reengineering, and constructs for dynamic languages. In the context of languages, we revisit
- applications http://rmod.inria.fr. We tackle this objective from two complementary perspectives:
- The goal of RMoD is to support remodularization and development of modular object-oriented
- University of Chile.
- The work will happen in collaboration between Inria Lille (RMOD), University of Bern and Pleiad from
- produce systems that can be used by (normal) developers so that user experiences provide real data.
- Results will be submitted to international conferences and journals and an effort will be put to
- following the PhD of A. Chis on Moldable tools.
- Finally, o3en tools are inflexible and cannot be adapted to specific domain or projects. New
- generation tools should support the developers customizing tools to their own workflow and domain
- following the PhD of A. Chis on Moldable tools.
- IDEs (integrated development environment) provides some supporting tools to ease development,
- such as automatic completion. Now several important tasks are not well covered: for example,
- merging changes, assessing the tests to automatically rerun, debugging extreme situations,…
- In addition, they are often based on static type information. The goal of this postdoc is to enhance
- IDEs for dynamically-typed languages: using multiple approaches: type inferencing, taking advantage
- of the AST structure, studying the use of examples to produce concrete types.
- Finally, often tools are inflexible and cannot be adapted to specific domain or projects. New
- generation tools should support the developers customizing tools to their own workflow and domain
- following the PhD of A. Chis on Moldable tools.
- Results will be submitted to international conferences and journals and an effort will be put to
- produce systems that can be used by (normal) developers so that user experiences provide real data.
- The work will happen in collaboration between Inria Lille (RMOD), University of Bern and Pleiad from
- University of Chile.
- RMOD
- The goal of RMoD is to support remodularization and development of modular object-oriented
- applications http://rmod.inria.fr. We tackle this objective from two complementary perspectives:
- reengineering, and constructs for dynamic languages. In the context of languages, we revisit
- language concepts such as modules and composition; we are also working on a new generation of
- reflective systems. We experiment with these programming constructs using Pharo, an open-source,
- reflective, object-oriented language http://www.pharo.org used by more than 30 Universities

**Mission confiée**

**Assignments**

The goal of this Postdoc is to work on high level IDE on one or more of the following topics:

- recommender systems (following PhD of S. Proksch)
- automatic completion
- back in time debugger and scriptable debuggers
- automatic test selection and execution (following PhD of V. Blondeau)
- type inferencer for tooling (following work on RoelTyper and PhD of L. Spoon on type
Principal activités

The plan is to:

- Survey the key developer activities.
- Define new model and enhance current.
- Realize prototypes, possibly using Pharo.
- Run validation with real end-users.
- Publish results in top venues.

Compétences

Skills

Pharo, OOP, TDD
Reflective programming
Program transformation

Avantages sociaux

Benefits

- Subsidised catering service
- Partially-reimbursed public transport
- Social security
- Paid leave
- Sports facilities
- Flexible working hours

More information about Lille:

http://www.lille3000.eu/portail/

http://www.lillemetropole.fr/mel.html
Rémunération

Remunerating

The gross monthly salary is 2653€