

CRI Bordeaux - Sud-Ouest



Digital technologies are generating new services, they deeply change our lifestyles and improve our daily life. In France, Inria is the only public research institute entirely dedicated to digital sciences. 400 R & D engineers assist the scientists in their daily work, they develop software tools to facilitate the research and set up technology platforms for experimentation.

Would you participate on our research projects or on development activities in advanced technologies? Then, join us!

Research team

SED is ... The PLAFRIM platform is...

<http://sed.inria.fr>

Contact Scientifique

herve.t.mathieu@inria.fr

Contact Ressources Humaine

herve.t.mathieu@inria.fr

Assignment

développement de technical tools for HPC Support for the users of the platform

Keywords

hpc

Qualification & experiences

Ingénieur Jeune Diplômé : To be an engineering graduate or having equivalent qualification - To have obtained diploma in 2012 or 2013

Skills & qualities

développement in C langage, fortant Linux System

Duration: 24 months

Location: Talence

Targeted hiring date: 01/10/14

Salary: 2530 €gross not negotiable

This offer is available from 15/05/14 to 30/09/14

Apply only online at: <http://www.inria.fr/en/young-graduate-engineers>

For your information, security and defense procedure

In the interests of protecting its scientific and technological assets, Inria is a restricted-access establishment. Consequently, it follows special regulations for welcoming any person who wishes to work with the institute. The final acceptance of each candidate thus depends on applying this security and defence procedure.

CRI Grenoble - Rhône-Alpes



Digital technologies are generating new services, they deeply change our lifestyles and improve our daily life. In France, Inria is the only public research institute entirely dedicated to digital sciences. 400 R & D engineers assist the scientists in their daily work, they develop software tools to facilitate the research and set up technology platforms for experimentation.

Would you participate on our research projects or on development activities in advanced technologies? Then, join us!

Research team

MOISE is a research project-team in applied mathematics and scientific computing, focusing on the development of mathematical and numerical methods for direct and inverse modelling in environmental applications (mainly geophysical fluids).

<http://team.inria.fr/moise/en/>

Contact Scientifique

laurent.debreu@inria.fr

Contact Ressources Humaine

aurelia.mouton@inria.fr

Assignment

AGRIF (Adaptive Grid Refinement In Fortran) is a software for structured adaptive mesh refinement. Used by several numerical modes, in particular in the area of ocean modelling, AGRIF is composed of a Fortran source to source transformation tool (written in Flex/Bison) and is associated with a library providing the necessary procedures dealing with the management of the hierarchy of grids and interactions between them. The objective of the work will be firstly to consolidate the current version of the software and secondly to make the necessary developments to go towards numerical simulations with a very large number of grids on parallel computers. Debreu L., C. Voulard and E. Blayo, 2008: AGRIF: Adaptive Grid Refinement In Fortran, Computers and Geosciences, vol. 34(1), 8-13
<http://www-ljk.imag.fr/MOISE/AGRIF>

Keywords

Adaptive mesh refinement for structured meshes, Parallel computing / load balancing

Qualification & experiences

Ingénieur Jeune Diplômé : To be an engineering graduate or having equivalent qualification - To have obtained diploma in 2012 or 2013

Skills & qualities

The required skills are parallel programming (MPI) and structured adaptive mesh refinement (SAMR) methods. Knowledge of one SAMR software (e.g. CHOMBO, SAMRAI) is desired.

Duration: 24 months

Targeted hiring date: 01/10/14

This offer is available from 07/05/14 to 31/12/14

Location: Laboratoire Jean Kuntzmann, Domaine Universitaire, Grenoble

Salary: 2530 €gross not negotiable

Apply only online at: <http://www.inria.fr/en/young-graduate-engineers>

For your information, security and defense procedure

In the interests of protecting its scientific and technological assets, Inria is a restricted-access establishment. Consequently, it follows special regulations for welcoming any person who wishes to work with the institute. The final acceptance of each candidate thus depends on applying this security and defence procedure.



Digital technologies are generating new services, they deeply change our lifestyles and improve our daily life. In France, Inria is the only public research institute entirely dedicated to digital sciences. 400 R & D engineers assist the scientists in their daily work, they develop software tools to facilitate the research and set up technology platforms for experimentation.

Would you participate on our research projects or on development activities in advanced technologies? Then, join us!

Research team

The expanded name for the Beagle research group is "Artificial Evolution and Computational Biology". Our aim is to position our research at the interface between biology and computer science and to contribute new results in biology by modeling biological systems. In other words we are making artifacts - from the Latin *artis factum* (an entity made by human art rather than by Nature) - and we explore them in order to understand Nature. Our research is based on an interdisciplinary scientific strateg

<http://team.inria.fr/beagle/>

Contact Scientifique

carole.knibbe@inria.fr

Contact Ressources Humaine

aurelia.mouton@inria.fr

Qualification & experiences

Ingénieur Jeune Diplômé : To be an engineering graduate or having equivalent qualification - To have obtained diploma in 2012 or 2013

Skills & qualities

The engineer will contribute to the development of Aevol (<http://www.aevol.fr>), a software platform for simulating experimental evolution of microorganisms. In Aevol, populations of digital microorganisms with artificial DNA sequences evolve in various conditions, allowing researchers to study the impact of environmental changes or mutation rates on genome evolution. The mission will consist in improving the performances, the software-quality and ease of use of Aevol. In particular, a distributed implementation of the platform will be developed using MPI.

Duration: 24 months

Location: Villeurbanne

Targeted hiring date: 01/10/14

Salary: 2530 €gross not negotiable

This offer is available from 22/05/14 to 31/12/14

Apply only online at: <http://www.inria.fr/en/young-graduate-engineers>

For your information, security and defense procedure

In the interests of protecting its scientific and technological assets, Inria is a restricted-access establishment. Consequently, it follows special regulations for welcoming any person who wishes to work with the institute. The final acceptance of each candidate thus depends on applying this security and defence procedure.



Digital technologies are generating new services, they deeply change our lifestyles and improve our daily life. In France, Inria is the only public research institute entirely dedicated to digital sciences. 400 R & D engineers assist the scientists in their daily work, they develop software tools to facilitate the research and set up technology platforms for experimentation.

Would you participate on our research projects or on development activities in advanced technologies? Then, join us!

Research team

The expanded name for the Beagle research group is "Artificial Evolution and Computational Biology". Our aim is to position our research at the interface between biology and computer science and to contribute new results in biology by modeling biological systems. In other words we are making artifacts - from the Latin *artis factum* (an entity made by human art rather than by Nature) - and we explore them in order to understand Nature. Our research is based on an interdisciplinary scientific strateg

<http://team.inria.fr/beagle/>

Contact Scientifique

carole.knibbe@inria.fr

Contact Ressources Humaine

aurelia.mouton@inria.fr

Qualification & experiences

Ingénieur Confirmé : To be at least an engineering graduate or having equivalent qualification (PhD Diploma accepted) and to have from 2 to 7 years software development experience.

Skills & qualities

Outstanding programming skills (C, C++) with a solid experience in performance/optimization and in parallel programming (MPI appreciated). Experience in software engineering (object oriented, version control system, compilation chain, tests). Experience in the animation of communities of developers and/or users. Interest in microbiology and evolution. Motivation for team work in an interdisciplinary environment. Good level of English.

Duration: 24 months

Location: Villeurbanne

Targeted hiring date: 01/10/14

Salary: 2600 to 3200 €gross based on experience

This offer is available from 22/05/14 to 31/12/14

Apply only online at: <http://www.inria.fr/en/experienced-engineers>

For your information, security and defense procedure

In the interests of protecting its scientific and technological assets, Inria is a restricted-access establishment. Consequently, it follows special regulations for welcoming any person who wishes to work with the institute. The final acceptance of each candidate thus depends on applying this security and defence procedure.

CRI Nancy - Grand Est



Digital technologies are generating new services, they deeply change our lifestyles and improve our daily life. In France, Inria is the only public research institute entirely dedicated to digital sciences. 400 R & D engineers assist the scientists in their daily work, they develop software tools to facilitate the research and set up technology platforms for experimentation.

Would you participate on our research projects or on development activities in advanced technologies? Then, join us!

Research team

Grid'5000 is a research infrastructure for the study of distributed systems and clouds. It is composed of around 1000 servers hosted in 11 sites, interconnected by a 10Gb/s network that can be isolated from Internet for experiments. Grid'5000 empowers academic research teams, sometimes in collaboration with industrial partners, to configure a network with specific characteristics and to deploy on some or all of the nodes a specific software stack for the duration of an experiment.

<https://www.grid5000.fr>

Contact Scientifique

lucas.nussbaum@loria.fr

Contact Ressources Humaine

aurelie.aubry@inria.fr

Assignment

The engineer will work in Grid'5000's support team. This team is in charge of developing, and pushing to production tools and processes to correctly administer the 11 Grid'5000 sites. The work is currently based for most services and servers on the use of puppet for configuration management, capistrano for deployment and on git to track changes. The team also generates reference OS images for the user community that need to be maintained and updated. It maintains tools and processes to ensure good traceability as Grid'5000 is used to support scientific experiments.

Keywords

Systems administration, network administration, configuration management, puppet

Qualification & experiences

Ingénieur Jeune Diplômé : To be an engineering graduate or having equivalent qualification - To have obtained diploma in 2012 or 2013

Skills & qualities

A good understanding of the concepts and techniques of systems administration and of network architectures ; good Linux knowledge and practice (administration, installation, maintenance, kernel compilation) and of scripting languages ; programming languages: mainly bash, perl, ruby (puppet) ; a first experience with cluster administration would be appreciated ; a first experience with administering networking equipment (switches or routers) would also be appreciated ; basic French knowledge, and fluent technical English.

Duration: 24 months

Location: Nancy

Targeted hiring date: 01/10/14

Salary: 2530 € gross not negotiable

This offer is available from 25/04/14 to 30/06/14

Apply only online at: <http://www.inria.fr/en/young-graduate-engineers>

For your information, security and defense procedure

In the interests of protecting its scientific and technological assets, Inria is a restricted-access establishment. Consequently, it follows special regulations for welcoming any person who wishes to work with the institute. The final acceptance of each candidate thus depends on applying this security and defence procedure.



Digital technologies are generating new services, they deeply change our lifestyles and improve our daily life. In France, Inria is the only public research institute entirely dedicated to digital sciences. 400 R & D engineers assist the scientists in their daily work, they develop software tools to facilitate the research and set up technology platforms for experimentation.

Would you participate on our research projects or on development activities in advanced technologies? Then, join us!

Research team

Grid'5000 is a research infrastructure for the study of distributed systems and clouds. It is composed of around 1000 servers hosted in 11 sites, interconnected by a 10Gb/s network that can be isolated from Internet for experiments. Grid'5000 empowers academic research teams, sometimes in collaboration with industrial partners, to configure a network with specific characteristics and to deploy on some or all of the nodes a specific software stack for the duration of an experiment.

<https://www.grid5000.fr>

Contact Scientifique

lucas.nussbaum@loria.fr

Contact Ressources Humaine

aurelie.aubry@inria.fr

Assignment

The objectives of the LAPLACE project are to extend Grid'5000's features to allow its users to conduct innovative experiments. Software Defined Networking, Big Data, and High Performance Computing are the domains where progress is expected. In the Grid'5000 development team, the engineer will take part in the design of infrastructure or API changes and will be responsible for their development. He or she will then collaborate with the support staff to put those developments to production. He or she could also be associated to scientific publications around this work.

Keywords

Systems and network developer, SDN, Big Data, HPC

Qualification & experiences

Ingénieur Confirmé : To be at least an engineering graduate or having equivalent qualification (PhD Diploma accepted) and to have from 2 to 7 years software development experience.

Skills & qualities

Required: Project management methods, Software development and associated tools in a Linux environment, Network and system programming with Linux. Appreciated: Strong knowledge in at least one domain amongst: Software Defined Networking, Big Data, HPC ; First experience with experiments, preferably using/about distributed systems (Cloud, HPC, P2P, Grids) ; Ruby programming ; Basic French knowledge ; devops

Duration: 24 months

Location: Nancy

Targeted hiring date: 01/10/14

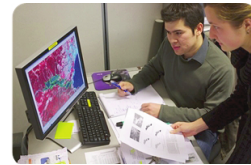
Salary: 2600 to 3200 €gross based on experience

This offer is available from 25/04/14 to 30/06/14

Apply only online at: <http://www.inria.fr/en/experienced-engineers>

For your information, security and defense procedure

In the interests of protecting its scientific and technological assets, Inria is a restricted-access establishment. Consequently, it follows special regulations for welcoming any person who wishes to work with the institute. The final acceptance of each candidate thus depends on applying this security and defence procedure.



Digital technologies are generating new services, they deeply change our lifestyles and improve our daily life. In France, Inria is the only public research institute entirely dedicated to digital sciences. 400 R & D engineers assist the scientists in their daily work, they develop software tools to facilitate the research and set up technology platforms for experimentation.

Would you participate on our research projects or on development activities in advanced technologies? Then, join us!

Research team

The MAGRIT project-team carries out researches in the field of computer vision, with a focus on augmented reality applications. Augmented reality is a relatively new field. It aims at augmenting the user's perception by adding in his field of view elements that improves his comprehension of his environment. Applications of this concept are plentiful and concern medical gesture assistance, learning and maintenance systems, cultural heritage, audiovisual... In order to integrate information at the

<http://magrit.loria.fr>

Contact Scientifique

erwan.kerrien@inria.fr

Contact Ressources Humaine

aurelie.aubry@inria.fr

Qualification & experiences

Ingénieur Jeune Diplômé : To be an engineering graduate or having equivalent qualification - To have obtained diploma in 2012 or 2013

Skills & qualities

Required: software engineering, excellent programming practices, C++; Appreciated: computer vision, computer graphics (OpenSceneGraph), user interfaces (Qt), Android development

Duration: 24 months

Location: Nancy

Targeted hiring date: 01/10/14

Salary: 2530 €gross not negotiable

This offer is available from 25/04/14 to 31/12/14

Apply only online at: <http://www.inria.fr/en/young-graduate-engineers>

For your information, security and defense procedure

In the interests of protecting its scientific and technological assets, Inria is a restricted-access establishment. Consequently, it follows special regulations for welcoming any person who wishes to work with the institute. The final acceptance of each candidate thus depends on applying this security and defence procedure.



Digital technologies are generating new services, they deeply change our lifestyles and improve our daily life. In France, Inria is the only public research institute entirely dedicated to digital sciences. 400 R & D engineers assist the scientists in their daily work, they develop software tools to facilitate the research and set up technology platforms for experimentation.

Would you participate on our research projects or on development activities in advanced technologies? Then, join us!

Research team

The proposed work is a joint effort between several research groups of the Inria Nancy - Grand Est research center on "Knowledge Modeling for Developing Educational Software Appropriate to the Learner." The engineer will be hosted in the Algorille (distributed systems and computing) et Score (large scale collaborative systems) teams and will have the opportunity to work with other research groups on topics such as user modeling and personalization, digital education, knowledge discovery.

<http://algorille.loria.fr> / <http://score.loria.fr>

Contact Scientifique

martin.quinson@loria.fr

Contact Ressources Humaine

aurelie.aubry@inria.fr

Assignment

Develop and improve the programmer's learning machine PLM (<http://www.loria.fr/~quinson/Teaching/PLM/>). PLM is a free and open learning environment dedicated to programming that allows to explore several aspects of algorithms through a set of interactive and graphical exercises. This platform is developed in Java and currently allows to learn 3 programming languages (Java, Python, Scala). The hired engineer will be involved in the evolution of the platform in order to build a platform for experimentation on teaching programming in the context of Massive Open Online Courses (MOOC). The objective is to have a tool that can be used as a research artifact to design new collaborative and self-adaptive learning tools, and a scientific instrument to develop an experimental pedagogy of computer science from fundamentals of algorithms to distributed algorithms for large scale systems. Activities : code refactoring; migration of the platform to a client-server architecture; design and programming of server that collect usage traces; design of an infrastructure for user modeling; improve the user experiences (learner and teacher).

Keywords

programming; software engineering; teaching; MOOC; learning; web; collaboration; e-learning;

Qualification & experiences

Ingénieur Jeune Diplômé : To be an engineering graduate or having equivalent qualification - To have obtained diploma in 2012 or 2013

Skills & qualities

A good understanding of the concepts and techniques of software engineering and web architectures. A good knowledge in programming languages Java, Python, Scala, script programming languages, web technologies (HTTP, HTML5, CSS, Javascript) and standard software development tools (git, maven). A first experience in agile software development methods (SCRUM, Kanban) and in system administration would also be appreciated.

Duration: 24 months

Location: Inria Grand-Est Nancy Research Center

Targeted hiring date: 01/10/14

Salary: 2530 €gross not negotiable

This offer is available from 05/05/14 to 30/09/14

Apply only online at: <http://www.inria.fr/en/young-graduate-engineers>

For your information, security and defense procedure

In the interests of protecting its scientific and technological assets, Inria is a restricted-access establishment. Consequently, it follows special regulations for welcoming any person who wishes to work with the institute. The final acceptance of each candidate thus depends on applying this security and defence procedure.



Digital technologies are generating new services, they deeply change our lifestyles and improve our daily life. In France, Inria is the only public research institute entirely dedicated to digital sciences. 400 R & D engineers assist the scientists in their daily work, they develop software tools to facilitate the research and set up technology platforms for experimentation.

Would you participate on our research projects or on development activities in advanced technologies? Then, join us!

Research team

The research themes of the Orpailleur team are about knowledge discovery in databases (KDD) and knowledge-based systems (KbS). KDD consists in extracting from large databases significant and reusable patterns, for feeding KbS whose role is to solve problems of different forms (design classification, information retrieval, recommendation) in application domain such as agronomy, biology, chemistry and medicine.

http://orpailleur.loria.fr/index.php/Main_Page

Contact Scientifique

amedeo.napoli@loria.fr

Contact Ressources Humaine

Amedeo.Napoli@loria.fr

Assignment

The FCA-TK project for "Formal Concept Analysis Tool Kit" takes place in the field of knowledge discovery in databases (KDD). The objective of FCA-TK is to design a system for mining complex data based on Formal Concept Analysis (FCA) and its variations, Relational Concept Analysis (RCA) and Pattern Structures. The FCA-TK project tries to answer the challenge of mining and analyzing complex data for discovering knowledge units with FCA. Nowadays, there is no robust and generic system based on FCA and dealing with complex data, including data analysis, visualization and result interpretation. The FCA-TK system implemented during the FCA-TK project will support KDD research projects in the Orpailleur team. The FCA-TK system will be proposed as a free-access system to be spread and shared. The assignment of the engineer will be to implement such a system with the design of interfaces and functionalities for KDD.

Keywords

formal concept analysis, design of concept lattices, visualization, annotation

Qualification & experiences

Ingénieur Jeune Diplômé : To be an engineering graduate or having equivalent qualification - To have obtained diploma in 2012 or 2013

Skills & qualities

Qualifications/skills (desired): (1) notions of artificial intelligence, learning and knowledge discovery (data mining); (2) programming in Java, C++ or Python; (3) team work; (4) practical and theoretical work: study and implementation of algorithms, use of new techniques of visualization.

Duration: 24 months

Location: Inria Nancy Grand Est

Targeted hiring date: 01/10/14

Salary: 2530 €gross not negotiable

This offer is available from 01/06/14 to 15/09/14

Apply only online at: <http://www.inria.fr/en/young-graduate-engineers>

For your information, security and defense procedure

In the interests of protecting its scientific and technological assets, Inria is a restricted-access establishment. Consequently, it follows special regulations for welcoming any person who wishes to work with the institute. The final acceptance of each candidate thus depends on applying this security and defence procedure.

CRI Rennes - Bretagne Atlantique



Digital technologies are generating new services, they deeply change our lifestyles and improve our daily life. In France, Inria is the only public research institute entirely dedicated to digital sciences. 400 R & D engineers assist the scientists in their daily work, they develop software tools to facilitate the research and set up technology platforms for experimentation.

Would you participate on our research projects or on development activities in advanced technologies? Then, join us!

Research team

Dyliss is a research team in bioinformatics. We focus on sequence analysis and systems biology. We use qualitative formal systems to characterize genetic actors from non model species, such as algae or mining bacteria, that control phenotypic answers when challenged by their environment.

<http://www.irisa.fr/dyliss/>

Contact Scientifique

anne.siegel@irisa.fr

Contact Ressources Humaine

myriam.ferrard-vinouze@inria.fr

Assignment

The goal of the project is to create a self-contained working environment for bioinformaticians in order to integrate heterogeneous data in non-model species. The final goal will be to propose groups of key-regulators of the response of an organism challenged by an environmental stress, based on large-scale data at different biological scales (genome, gene expression, metabolic targets, academic knowledge). The final output of the approach will be used as input of methods for bio-chip design developed at Inria-Chile. The working environment will first be designed as a workflow based on existing bricks (<http://bioasp.github.io/>). In a second step, the working environment may be encapsulated in a self-contained python package.

Keywords

bioinformatics; constraint programming; workflow; biological systems

Qualification & experiences

Ingénieur Jeune Diplômé : To be an engineering graduate or having equivalent qualification - To have obtained diploma in 2012 or 2013

Skills & qualities

Constraint programming (ASP; prolog; ILP). XML. Programming : python, perl, shell

Duration: 24 months

Location: Rennes

Targeted hiring date: 01/10/14

Salary: 2530 €gross not negotiable

This offer is available from 18/04/14 to 18/04/15

Apply only online at: <http://www.inria.fr/en/young-graduate-engineers>

For your information, security and defense procedure

In the interests of protecting its scientific and technological assets, Inria is a restricted-access establishment. Consequently, it follows special regulations for welcoming any person who wishes to work with the institute. The final acceptance of each candidate thus depends on applying this security and defence procedure.



Digital technologies are generating new services, they deeply change our lifestyles and improve our daily life. In France, Inria is the only public research institute entirely dedicated to digital sciences. 400 R & D engineers assist the scientists in their daily work, they develop software tools to facilitate the research and set up technology platforms for experimentation.

Would you participate on our research projects or on development activities in advanced technologies? Then, join us!

Research team

Grid'5000 is a research infrastructure for the study of distributed systems and clouds. It is composed of around 1000 servers hosted in 11 sites, interconnected by a 10Gb/s network that can be isolated from Internet for experiments. Grid'5000 empowers academic research teams, sometimes in collaboration with industrial partners, to configure a network with specific characteristics and to deploy on some or all of the nodes a specific software stack for the duration of an experiment.

<https://www.grid5000.fr>

Contact Scientifique

david.margery@inria.fr

Contact Ressources Humaine

myriam.ferrard-vinouze@inria.fr

Assignment

The objectives of the LAPLACE project are to extend Grid'5000's features to allow its users to perform innovative experiments. Software Defined Networking, Big Data, and HighPerformance Computing are the domains where progress can be made. In Grid'5000 development team, the engineer will take part in the design of infrastructure or API changes and will be responsible for their development. It will then collaborate with the support staff to put those developments to production. He or she could also be associated to scientific publications around this work.

Keywords

Systems and network developer, SDN, Big Data, HPC

Qualification & experiences

Ingénieur Confirmé : To be at least an engineering graduate or having equivalent qualification (PhD Diploma accepted) and to have from 2 to 7 years software development experience.

Skills & qualities

Required: Project management methods ; Software development and associated tools in a Linux environment ; Network and system programming with Linux Appreciated: Strong knowledge in a least one domain amongst: Software Defined Networking, Big Data, HPC ; First experience with experiments, preferably using/about distributed systems (Cloud, HPC, P2P, Grids) ; Ruby programming ; Basic French knowledge ; devops

Duration: 24 months

Location: Rennes

Targeted hiring date: 01/10/14

Salary: 2600 to 3200 €gross based on experience

This offer is available from 25/04/14 to 30/09/14

Apply only online at: <http://www.inria.fr/en/experienced-engineers>

For your information, security and defense procedure

In the interests of protecting its scientific and technological assets, Inria is a restricted-access establishment. Consequently, it follows special regulations for welcoming any person who wishes to work with the institute. The final acceptance of each candidate thus depends on applying this security and defence procedure.



Digital technologies are generating new services, they deeply change our lifestyles and improve our daily life. In France, Inria is the only public research institute entirely dedicated to digital sciences. 400 R & D engineers assist the scientists in their daily work, they develop software tools to facilitate the research and set up technology platforms for experimentation.

Would you participate on our research projects or on development activities in advanced technologies? Then, join us!

Research team

GCG is about “compiler optimizations for performance and energy consumption”. Our goal is to pave the way toward the design of future optimizing compilers: they shall be hybrid (mixing ahead-of-time and run-time technologies); they shall manipulate hybrid intermediate representations that telescope high-level/domain specific information and low-level/hardware description. Our expertise are on compiler technology, algorithmic, combinatorial optimizations, and run-time systems.

<https://team.inria.fr/GCG/>

Contact Scientifique

fabrice.rastello@inria.fr

Contact Ressources Humaine

aurelia.mouton@inria.fr

Assignment

Tirex is a very low level serialized compiler intermediate representation. Today Tirex is used to interface several compilers (Open64, gcc) to a back-end optimizer (lao). The main goal of this position is to: 1. consolidate existing frameworks; 2. develop an interface with QEMU; 3. develop an interface with LLVM

Keywords

compiler optimization, intermediate representation, binary translation, llvm, qemu

Qualification & experiences

Ingénieur Jeune Diplômé : To be an engineering graduate or having equivalent qualification - To have obtained diploma in 2012 or 2013

Skills & qualities

Required: 1. basic notions of compiler infrastructure and binary translation; 2. programming developments in C/C++/java. Plus: 1. past experience in developing a optimization pass in llvm; 2. software engineering practice such as continuous integration

Duration: 24 months

Location: Grenoble

Targeted hiring date: 01/10/14

Salary: 2530 €gross not negotiable

This offer is available from 16/05/14 to 31/12/14

Apply only online at: <http://www.inria.fr/en/young-graduate-engineers>

For your information, security and defense procedure

In the interests of protecting its scientific and technological assets, Inria is a restricted-access establishment. Consequently, it follows special regulations for welcoming any person who wishes to work with the institute. The final acceptance of each candidate thus depends on applying this security and defence procedure.

CRI Saclay - Île-de-France



Digital technologies are generating new services, they deeply change our lifestyles and improve our daily life. In France, Inria is the only public research institute entirely dedicated to digital sciences. 400 R & D engineers assist the scientists in their daily work, they develop software tools to facilitate the research and set up technology platforms for experimentation.

Would you participate on our research projects or on development activities in advanced technologies? Then, join us!

Research team

<https://www.inria.fr/en/centre/saclay>

Contact Scientifique

gregory.grefenstette@inria.fr

Contact Ressources Humaine

fanny.mathy@inria.fr

Assignment

Develop a Platform for Enriching and Managing private Personal Information. Tasks: Design and implement data connectors to personal information sources (mail, Facebook, GPS apps); Implement a private version of ElasticSearch/Lucene indexing this data; Transform OpenData ontologies into Lucene facets for annotating data; Implement published taxonomy induction algorithms; Test and integrate these modules into a personal information retrieval platform.

Keywords

Search ; Lucene ; ontology; quantified self ; surveillance ; Unix ; ElasticSearch ; privacy ; natural language processing; semantics ; Open Data ; knowledge management

Qualification & experiences

Ingénieur Jeune Diplômé : To be an engineering graduate or having equivalent qualification - To have obtained diploma in 2012 or 2013

Skills & qualities

Young computer engineer (graduating class 2013 or 2014). Ability to understand and implement published algorithms
Interest in research, experimentation and innovation Good knowledge of unix, shell scripts, natural language processing
Familiarity with Open Data, Hadoop, internals of search engines
Programming experience in Java, JSON, connectors
Rigor, autonomy, curiosity

Duration: 24 months

Location: Palaiseau

Targeted hiring date: 01/10/14

Salary: 2530 €gross not negotiable

This offer is available from 05/05/14 to 30/09/14

Apply only online at: <http://www.inria.fr/en/young-graduate-engineers>

For your information, security and defense procedure

In the interests of protecting its scientific and technological assets, Inria is a restricted-access establishment. Consequently, it follows special regulations for welcoming any person who wishes to work with the institute. The final acceptance of each candidate thus depends on applying this security and defence procedure.



Digital technologies are generating new services, they deeply change our lifestyles and improve our daily life. In France, Inria is the only public research institute entirely dedicated to digital sciences. 400 R & D engineers assist the scientists in their daily work, they develop software tools to facilitate the research and set up technology platforms for experimentation.

Would you participate on our research projects or on development activities in advanced technologies? Then, join us!

Research team

PARIETAL is an INRIA Research Team within the Neurospin platform of CEA Institute. It is located in Saclay, in Neurospin building. Neurospin is a platform for the acquisition of neuroimaging data based on high fields MRI scanners, which are the most powerful ones in France today. The scanners are used to acquire high-quality data, whose resolution is also optimized (about 1mm). Parietal aims at addressing several issues raised by the analysis of this data, in order to benefit from the potential

<http://team.inria.fr/parietal/>

Contact Scientifique

gael.varoquaux@inria.fr

Contact Ressources Humaine

fanny.mathy@inria.fr

Qualification & experiences

Ingénieur Confirmé : To be at least an engineering graduate or having equivalent qualification (PhD Diploma accepted) and to have from 2 to 7 years software development experience.

Skills & qualities

Un ingénieur confirmé, expert en Python scientifique, en parallélisme, en machine learning, et déjà très expérimenté avec le scikit learn. Excellent niveau en anglais requis Très bonne connaissance de git/github Très bonne connaissance du monde open source

Duration: 24 months

Location: CEA Saclay

Targeted hiring date: 01/10/14

Salary: 2600 to 3200 €gross based on experience

This offer is available from 06/05/14 to 30/09/14

Apply only online at: <http://www.inria.fr/en/experienced-engineers>

For your information, security and defense procedure

In the interests of protecting its scientific and technological assets, Inria is a restricted-access establishment. Consequently, it follows special regulations for welcoming any person who wishes to work with the institute. The final acceptance of each candidate thus depends on applying this security and defence procedure.

Assignement

La mission vise à consolider le développement du scikit-learn, un outil général pour l'apprentissage statistique en Python. En particulier nous voulons améliorer l'efficacité algorithmique de la librairie sur les très gros volumes de données (la problématique du "big data"). Les apports envisagés sont techniques (parallélisation de code, amélioration des implémentations) et algorithmiques (optimisation stochastique, représentations parcimonieuses, algorithmes en ligne et implémentations "out of core"). Elles appuieront l'effort constant de la communauté extérieure à Inria qui aide au développement de scikit-learn et bénéficieront directement à l'EPI Parietal et aux autres EPI qui utilisent scikit-learn dans leur recherche, mais aussi au rayonnement de Inria dans le monde industriel très actif de la fouille de données.

Keywords

Machine learning, big data, scikit learn.



Digital technologies are generating new services, they deeply change our lifestyles and improve our daily life. In France, Inria is the only public research institute entirely dedicated to digital sciences. 400 R & D engineers assist the scientists in their daily work, they develop software tools to facilitate the research and set up technology platforms for experimentation.

Would you participate on our research projects or on development activities in advanced technologies? Then, join us!

Research team

Créé en 1967, Inria est le seul institut public de recherche entièrement dédié aux sciences du numérique. A l'interface des sciences informatiques et des mathématiques, les 3500 chercheurs d'Inria inventent les technologies numériques de demain. Issus des plus grandes universités internationales, ils croisent avec créativité recherche fondamentale et recherche appliquée. Ils se consacrent à des problèmes concrets, collaborent avec les acteurs de la recherche publique et privée en France et

<http://www.lix.polytechnique.fr/cryptologie/>

Contact Scientifique

Daniel.Augot@inria.fr

Contact Ressources Humaine

elodie.barra@inria.fr

Assignement

Sous la direction scientifique de Daniel Augot et de Clément Pernet, le candidat devra re-designer et re-développer la bibliothèque de codes correcteurs d'erreurs dans le logiciel de calcul formel sage (<http://sagemath.org/>). En sortie du développement, il aidera Daniel Augot et Clément Pernet à organiser une rencontre internationale "sage days" (<http://wiki.sagemath.org/Workshops>) de trois à cinq jours portant sur la librairie développée pendant le projet. Le candidat mènera un développement informatique à la fois au niveau de la conception des interfaces de programmation, mais aussi de l'implantation des algorithmes associés, avec une certaine autonomie. Le candidat devra rapidement être performant sur le logiciel sage. Les 3 premiers mois seront de rudiments de la théorie des codes correcteurs et des mathématiques associées (avec Daniel Augot et Clément Pernet). Ensuite, le candidat devra pouvoir interagir de manière ouverte avec la communauté sage. Il aura quelques déplacements annuels à effectuer à Grenoble pour rencontrer Clément Pernet. Au bout de 18 mois, il aidera à organiser un événement physique "sage days" pour inviter les chercheurs à se familiariser avec sa librairie, et à y contribuer.

Keywords

git, python, sage, développement communautaire, international, calcul formel, algèbre appliquée, codes correcteurs d'erreur, relationnel, organisationnel.

Qualification & experiences

Ingénieur Jeune Diplômé : To be an engineering graduate or having equivalent qualification - To have obtained diploma in 2012 or 2013

Skills & qualities

Ingénieur en informatique, avec un fort goût pour la recherche. Maîtrise d'un environnement informatique linux standard python, shell, git. Le langage C est un plus. Compétences ou rudiments en mathématiques supérieures, notamment en algèbre abstraite de base: polynômes, matrices, corps finis, et leur manipulation informatique (calcul formel). Familiarité avec les outils de développement coopératifs, comme git, bitbucket, etc. Bon niveau anglais, aptitude à l'expression écrite dans les réseaux informatiques. Intérêt pour un développement communautaire international.

Duration: 24 months

Location: Palaiseau

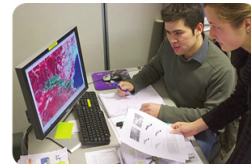
Targeted hiring date: 01/10/14

Salary: 2530 €gross not negotiable

This offer is available from 09/05/14 to 30/09/14

Apply only online at: <http://www.inria.fr/en/young-graduate-engineers>

For your information, security and defense procedure



Digital technologies are generating new services, they deeply change our lifestyles and improve our daily life. In France, Inria is the only public research institute entirely dedicated to digital sciences. 400 R & D engineers assist the scientists in their daily work, they develop software tools to facilitate the research and set up technology platforms for experimentation.

Would you participate on our research projects or on development activities in advanced technologies? Then, join us!

Research team

The mission will be carried out within the SEISM group, which covers the various national IT facilities of Inria. A close liaison will be needed with the main developers of national publication repository HAL in Lyon as well as with the Inria researchers in Berlin who have developed the technology to be integrated on HAL.

<http://www.inria.fr/en/centre/saclay>

Contact Scientifique

laurent.romary@inria.fr

Contact Ressources Humaine

aurelia.mouton@inria.fr

Assignment

Since 2000, the HAL (Hyper Articles en Ligne) French national archive allows the researchers to archive their scientific papers and provides a free Open Access to the research community. With more than 300.000 full texts, it is today the major scientific institutional dissemination platform in France. The objective of the work is to enrich the HAL platform with additional services based on recent advances in semantic and machine learning processing. The engineer will participate to the development, the integrating and the test of software services for analyzing scientific document collections. More precisely, the engineer will be in charged of: - the transfer of research results and technologies recently developed at Inria to the HAL document collection and platform. This includes automatic extraction of bibliographical information, semantic analysis, scientific terminology extraction and normalization, - the integration of content analytics functionalities: multi-level reporting, aggregations, collaboration analyses, technology map, clustering, etc. The work is an opportunity for a young graduate engineer to learn and experiment with modern document engineering technologies in a top-level research environment, while contributing to strengthen the Open Access infrastructure for the benefit of the scientific communities.

Keywords

Semantic text processing, scientific information, data analytics, document engineering, open-access scientific archive

Qualification & experiences

Ingénieur Jeune Diplômé : To be an engineering graduate or having equivalent qualification - To have obtained diploma in 2012 or 2013

Skills & qualities

Software development -Good knowledge of Java, -Knowledge of software engineering and tools (specification, testing, IDE, documentation, load/performance testing, etc.), -Knowledge of web architecture, in particular web services (REST, Tomcat, Jetty, Jersey, Spring) -Unix environment, -Some knowledge in Java build technology and integration: maven, JUnit, Hudson/Jenkins and version control (SVN, git, ...), -Some knowledge of database technologies (SQL, NoSQL) and XML, and web front-end development (JavaScript, jQuery, ...) would be a plus. Personal skills Creativity, autonomy, detail oriented, problem solving, effective communication, scientific and technical English

Duration: 24 months

Location: Montbonnot

Targeted hiring date: 01/10/14

Salary: 2530 €gross not negotiable

This offer is available from 08/07/14 to 31/12/14

Apply only online at: <http://www.inria.fr/en/young-graduate-engineers>

For your information, security and defense procedure

CRI Sophia Antipolis - Méditerranée



Digital technologies are generating new services, they deeply change our lifestyles and improve our daily life. In France, Inria is the only public research institute entirely dedicated to digital sciences. 400 R & D engineers assist the scientists in their daily work, they develop software tools to facilitate the research and set up technology platforms for experimentation.

Would you participate on our research projects or on development activities in advanced technologies? Then, join us!

Research team

Plants are branching living organisms that develop throughout their lifetimes. Organs are created by small embryogenic regions at the tip of each axis, called apical meristems. In the project Virtual Plants, we are interested in studying plant apical meristem functioning and development. We believe that a detailed analysis at different temporal and spatial scales of apical meristem processes, based on advanced mathematical and computational methods and tools, will lead us to get a deeper and b

<http://team.inria.fr/virtualplants>

Contact Scientifique

yann.guedon@inria.fr

Contact Ressources Humaine

marie-line.ramfos@inria.fr

Assignment

Your objective will be to improve software quality and diffusion of VPlants components used in plant phenotyping. Virtual Plants has played a pioneering role since 20 years in the development of methods for analyzing plant phenotyping data that take account of plant complexity. Numerous software components have been developed during this period. An in-depth refactoring is thus needed to better address the multiple collaborations with biologists and to enlarge the diffusion of our approach in the scientific community. VPlants components are integrated in the OpenAlea platform. You will refactor these components to fulfill OpenAlea software standards. You will develop Python wrappers for C++ libraries, unit and functional tests and update documentation using Doxygen et Sphinx. You will interface VPlants components with visualization tools (matplotlib, tulip, networkx) and data analysis packages in R (via rpy2) and Python (pandas, scikits.learn). These components will be illustrated by tutorials developed in IPython Notebook.

Keywords

plant phenotyping, data analysis, Python, C++

Qualification & experiences

Ingénieur Jeune Diplômé : To be an engineering graduate or having equivalent qualification - To have obtained diploma in 2012 or 2013

Skills & qualities

- Having a qualification in computer science and knowledge in software development and related tools (version manager, compilation, documentation, test ...), - Knowledge in data analysis (statistics, machine learning, bioinformatics), - Programming languages (C++, Python, R) and visualization tools (matplotlib), - Master technical and scientific English, - Ability to animate an open source community and team work skills.

Duration: 24 months

Location: Montpellier

Targeted hiring date: 01/10/14

Salary: 2530 €gross not negotiable

This offer is available from 12/05/14 to 05/09/14

Apply only online at: <http://www.inria.fr/en/young-graduate-engineers>

For your information, security and defense procedure

In the interests of protecting its scientific and technological assets, Inria is a restricted-access establishment. Consequently, it follows special regulations for welcoming any person who wishes to work with the institute. The final acceptance of each candidate thus depends on applying this security and defence procedure.



Digital technologies are generating new services, they deeply change our lifestyles and improve our daily life. In France, Inria is the only public research institute entirely dedicated to digital sciences. 400 R & D engineers assist the scientists in their daily work, they develop software tools to facilitate the research and set up technology platforms for experimentation.

Would you participate on our research projects or on development activities in advanced technologies? Then, join us!

Research team

The Athena project-team in Inria Sophia Antipolis develops original methods and models for brain signal and image analysis. It has a longstanding expertise in brain data analysis from non-invasive imaging modalities (diffusion MRI, electro- and magneto-encephalography). It also develops methodology for single-trial and real-time analysis of brain signals. Athena contributes to developing the OpenViBE opensource software platform for Brain Computer Interfaces.

<http://team.inria.fr/athena/>

Contact Scientifique

maureen.clerc@inria.fr

Contact Ressources Humaine

marie-line.ramfos@inria.fr

Assignment

Brain Computer Interfaces, which aim to decode brain signals and convert them into commands, have proved their feasibility in research laboratories, and are now facing the challenge of their use out-of-the-lab. The OpenViBE-X ADT aims to accelerate the setup time of BCIs, by eliminating the need for calibration, a time-consuming and tiring phase for end-users. This will require to program auto-calibration and online adaptation methods, which will be validated on pre-recorded BCI datasets. This work will come as support to an on-going clinical study with Nice University hospital, on the use of the P300-speller (a brain-actuated keyboard) by severely disabled patients. Your role as an engineer will be to program the methods, to validate them experimentally, and to participate in the OpenViBE software platform for its development and maintenance.

Keywords

EEG; eye-tracking; Brain Computer Interfaces; P300 speller; assistive technology; machine learning; classification; signal processing

Qualification & experiences

Ingénieur Confirmé : To be at least an engineering graduate or having equivalent qualification (PhD Diploma accepted) and to have from 2 to 7 years software development experience.

Skills & qualities

C++ (proficiency), python (knowledge), software engineering (debugging, non-regression testing, automatic building). Previous experience of OpenViBE development would be appreciated.

Duration: 24 months

Location: Sophia Antipolis

Targeted hiring date: 01/11/14

Salary: 2600 to 3200 €gross based on experience

This offer is available from 27/05/14 to 05/09/14

Apply only online at: <http://www.inria.fr/en/experienced-engineers>

For your information, security and defense procedure

In the interests of protecting its scientific and technological assets, Inria is a restricted-access establishment. Consequently, it follows special regulations for welcoming any person who wishes to work with the institute. The final acceptance of each candidate thus depends on applying this security and defence procedure.



Digital technologies are generating new services, they deeply change our lifestyles and improve our daily life. In France, Inria is the only public research institute entirely dedicated to digital sciences. 400 R & D engineers assist the scientists in their daily work, they develop software tools to facilitate the research and set up technology platforms for experimentation.

Would you participate on our research projects or on development activities in advanced technologies? Then, join us!

Research team

The research activities of the project-team are concerned with the formulation, analysis and evaluation of numerical methods and high performance resolution algorithms for the computer simulation of evolution problems in complex domains and heterogeneous media. The resulting methodologies are applied to wave propagation problems pertaining to computational electromagnetics and computational geoseismics.

<http://www-sop.inria.fr/nachos/>

Contact Scientifique

stephane.lanteri@inria.fr

Contact Ressources Humaine

marie-line.ramfos@inria.fr

Assignment

Not available

Keywords

High performance computing

Qualification & experiences

Ingénieur Confirmé : To be at least an engineering graduate or having equivalent qualification (PhD Diploma accepted) and to have from 2 to 7 years software development experience.

Skills & qualities

Software engineering Scientific parallel programming

Duration: 24 months

Location: Nachos project-team

Targeted hiring date: 01/11/14

Salary: 2600 to 3200 €gross based on experience

This offer is available from 19/05/14 to 19/05/14

Apply only online at: <http://www.inria.fr/en/experienced-engineers>

For your information, security and defense procedure

In the interests of protecting its scientific and technological assets, Inria is a restricted-access establishment. Consequently, it follows special regulations for welcoming any person who wishes to work with the institute. The final acceptance of each candidate thus depends on applying this security and defence procedure.



Digital technologies are generating new services, they deeply change our lifestyles and improve our daily life. In France, Inria is the only public research institute entirely dedicated to digital sciences. 400 R & D engineers assist the scientists in their daily work, they develop software tools to facilitate the research and set up technology platforms for experimentation.

Would you participate on our research projects or on development activities in advanced technologies? Then, join us!

Research team

The engineer will be hosted in the software development team (SED, www.inria.fr/sophia/dream) and will work in connection with the Apics Asclepios and Athena teams from the Sophia Antipolis Méditerranée center and their partners, in order to structure the software developments through a high level software Framework, respectively on inverse problems to localize sources (Apics and Athena) and multidimensional medical image processing (Asclepios and Athena).

<http://www.inria.fr/sophia/dream>

Contact Scientifique

david.rey@inria.fr

Contact Ressources Humaine

marie-line.ramfos@inria.fr

Assignment

The engineer will carry out software developments and scientific experimentations for research teams. His main objectives will consist in participating to the design, implementation and evolution of software platforms for these teams, using and recommending good practises (such as version system, tests, build and package system).

Keywords

Software engineering, software framework, GUI

Qualification & experiences

Ingénieur Jeune Diplômé : To be an engineering graduate or having equivalent qualification - To have obtained diploma in 2012 or 2013

Skills & qualities

Having a qualification in computer science and having knowledge of software development and related tools (versions manager, compilation, documentation, tests, debugging,...); Programming languages : C, C++, Matlab; To master technical and scientific English; Additional skills or abilities that would be appreciated: Swig, Qt, decentralized version system (e.g. git).

Duration: 24 months

Location: SED Sophia Antipolis

Targeted hiring date: 01/10/14

Salary: 2530 €gross not negotiable

This offer is available from 05/06/14 to 05/06/14

Apply only online at: <http://www.inria.fr/en/young-graduate-engineers>

For your information, security and defense procedure

In the interests of protecting its scientific and technological assets, Inria is a restricted-access establishment. Consequently, it follows special regulations for welcoming any person who wishes to work with the institute. The final acceptance of each candidate thus depends on applying this security and defence procedure.