INVENTEURS DU MONDE NUMÉRIQUE

– *English version* –

Campagne 2013 de recrutement d'ingénieurs jeunes diplômés

Updated on the 29th may 2013

Note :
Only english job offers appear in this document,
don't hesitate to check the french pdf version for more.

Bordeaux

X-SHADE - shading, real-time, 3D rendering, vector drawing, design, visual effects, video games

New **HPC Collectif -** Calcul parallèle; génie logiciel; méthode hiérarchique; méthode multipole rapide; HPC, cluster, calcul distribué, développement logiciel

EZ-PERF - development, performance measure, ezTrace, HPC, execution trace, instrumentation.

EnRéVAN - Virtual Reality, Simulation, Assistive Technology

KidLearn - check the french document

APADIF - data mining, check the french document

Elasticus - check the french document

Grenoble

New **ALADDIN-G5K -** Developpement, Ruby, REST, javascript, jquery

brow2brow - peer-to-peer, HTML5, social networks, streaming, electronic voting

K'STAR - check the french document

OAR Blossom - check the french document

P2N - Robotics, autonomous navigation

Para-Full - Modeling, statistics, health

SAMSON Store - Web developement, databases, online stores

New **SOFA - SQUASH -** C++ - software quality - continuous integration

New **SEISM -** check the french document

Lille

CHIC - clustering, statistical learning, C++, R

eSurgeon - consommation énergétique, génie logiciel, Akka

Metroscope - Combinatorial optimization, datamining, Multi- objective optimization, Web technology.

MO-Mine – check the french document

Nancy

ACB – check the french document

COSETTE - experimentation, large scale distributed systems

New **Metroscope -** Combinatorial optimization, datamining, Multi- objective optimization, Web technology.

R2D2 - check the french document

SEA - check the french document

VisArtico - Visualization, articulograph, trajectory optimization, articulatory synthesis, vocal tract animation

OpenViBE_NT - Brain-Computer Interfaces; C++; OpenViBE; machine learning, software interoperability

Rennes

New **ALADDIN-G5K -** Developpement, Ruby, REST, javascript, jquery

New **brow2brow -** peer-to-peer, HTML5, social networks, streaming, electronic voting

FlumiLab - check the french document

HumanoïdViS - check the french document

IPBS - Benchmarks, parallel computing, integration, performance analysis

MAN-IP - check the french document

SAWJA-ANDROID – Android, Java, OCaml

Rocquencourt

DBSoft - check the french document

iConnect - Middleware, protocol mediation, resource discovery, open source software.

SBMC - check the french document

VERDANDI - check the french document

Saclay

Cloak - Cloud, map-reduce, databases, query optimization, parallel processing, Semantic Web data

New **HPC Collectif -** Calcul parallèle; génie logiciel; méthode hiérarchique; méthode multipole rapide;

YALTA2 - HMI, Matlab, Simulink, Control of dynamical systems

Sophia

New **ALADDIN-G5K -** Developpement, Ruby, REST, javascript, jquery

ElectroSmart - Android, smartphone, background electromagnetic radiation, experimentations

Mars-Alt - 3D imaging, software engineering, 3D Atlases, Laser imaging, geometric modeling, software platform, tissues, 3D segmentation, big data

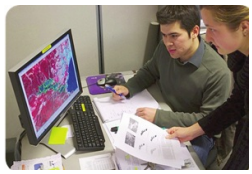
OrbiCG - C++, triangulations, meshes, non-Euclidean geometry

QUASAR - Software architecture - Semantic Web - Ontologies - Algorithms

SensBio - Workflow, Cloud computing, Big Data

Bordeaux

Job opportunity
Engineer R & D



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 recent evolutions in computer networks technology, as well as their diversification, yield a tremendous change in the use of these networks: applications and systems can now be designed at a much larger scale than before. This scaling evolution is dealing with the amount of data, the number of computers, the number of users, and the geographical diversity of these users. The goal of CEPAGE is to design high level distributed algorithms and data structures to help programming these large s

http://cepage.bordeaux.inria.fr/

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Assignement

tbd

Keywords data mining

Qualification & experiences

Ingénieur Confirmé : To be at least an engineering graduate or having equivalent qualification and to have from 2 to 7 years' software development experience

Skills & qualities

tbd

Duration: 12 months renewable 1 time

Location: Talence

Targeted hiring date: 15/10/13

Salary: 2600 to 3500 € gross based on experience

This offer is available from 22/04/13 to 27/09/13

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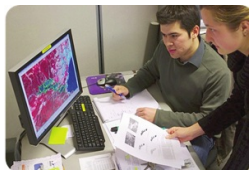
Job opportunity
Engineer R & D



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Research team

The frantic nature of technological advances in the area of multimedia communications, compounded with the effective convergence between telecommunication and computer networks, is opening up a host of new functionalities, placing service creation as a fundamental vehicle to bring these changes to end-users. The phoenix group aims to develop principles, techniques and tools for the development of communication services. To address the requirements of this domain, the scope of our research com

http://phoenix.inria.fr/

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Assignement

Cognitive impairments (memory, attention, time and space orientation, etc) affect a large part of the population, including elderly, patients with brain injuries (traumatic brain injury, stroke, etc), and people suffering from cognitive disabilities, such as Down syndrome. The objective of the PHOENIX research group is to provide an integrated and evolving digital assistance platform that easily integrates new technological devices and that is adaptable to individuals and their cognitive changes. This platform relies on DiaSuiteBox, an integrated environment that covers the development lifecycle of pervasive computing applications, from design to deployment. When developing such digital assistance platform, two major challenges are: 1) accurate diagnosis of the difficulties that people face in their daily environment (eg, home or school), 2) virtual validation of the assistive applications before the deployment phase. To do so, we plan to leverage 3d virtual environments, by interfacing the existing DiaSuiteBox platform with a 3D development platform.

Keywords Virtual Reality, Simulation, Assistive Technology

Qualification & experiences

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

Skills & qualities

- Development of 3D virtual environments
- Java programming
- Software engineering

Duration: 12 months renewable 1 time

Location: Talence

Targeted hiring date: 15/10/13

Salary: 2530 € gross not negotiable

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Job opportunity
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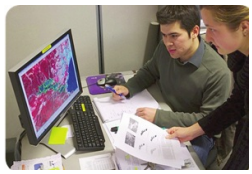

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Research team

The Service of Experimentation and software Development (SED) is a team of engineers dedicated to developments and experimentations with the research teams of INRIA. For this job, the work will be done in collaboration with the HiePACS team (that works on high performance parallel algorithms)

http://sed.bordeaux.inria.fr

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Assignement

Intensive numerical simulations realized by scientists often lack of an access to reliable and accurate performance data, allowing an efficient usage of modern parallel computation systems. Having a library of performance measure and analysis is crucial for the development of these large scale simulations. It is in this perspective that this job takes place. Its purpose is to enhance the existing tool (the trace generator tool EZTrace) into a more powerful tool designed to measure software performance (in terms of time, I/O, memory consumption, etc.) while preserving EZTrace assets (low overhead, easy code instrumentation, plugin mechanism, etc.).

Keywords development, performance measure, ezTrace, HPC, execution trace, instrumentation.

Qualification & experiences

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

Skills & qualities

- Systems: Linux, Unix
- Programming languages: C, C++, Fortran, Perl, Python
- Collaborative development tools (SVN or equivalent)
- Software enginering
- Redaction of reports, documentations, ..
- Support to clients and users

Duration: 12 months renewable 1 time

Targeted hiring date: 15/10/13

This offer is available from 22/04/13 to 27/09/13

Location: Talence(33), centre de recherche Inria Bordeaux

Salary: 2530 € gross not negotiable

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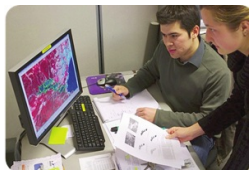

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Research team

An important force which has continued to drive HPC has been to focus on frontier milestones which consist in technical goals that symbolize the next stage of progress in the field. In the 1990s, the HPC community sought to achieve computing at a teraflop rate and currently we are able to compute on the first leading architectures at a petaflop rate. Generalist petaflop supercomputers are likely to be available in 2010-2012 and some communities are already in the early stages of thinking abou

https://team.inria.fr/hiepacs/

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Assignement

L'objectif cette action est de développer une bibliothèque parallèle pour calculer les interactions de N-corps par la méthode des multipôles rapides sur les architectures modernes (cluster de manycores). La conception de cette bibliothèque performante, à partir des prototypes existants, permettra l'utilisation simple et transparente dans les grands codes de calcul pour des applications en astrophysique, en dynamique moléculaire, ...

L'ingénieur sera amener à :

- Reprendre l'architecture des deux prototypes existants pour concevoir l'architecture finale du code. Adapter les structures de données pour les architectures cibles ;
- Développement pour un octree non uniforme ;
- Valider des développements sur des architectures variées (manycores, clusters, ...) et réaliser une documentation technique et utilisateur complète;

Keywords Calcul parallèle; génie logiciel; méthode hiérarchique; méthode multipole rapide;

Qualification & experiences

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

Skills & qualities

- Formation en informatique et connaissances du développement logiciel et des outils associés (gestionnaire de versions, compilation, documentation, tests, débogage, ...) ;
- Langages de programmation : C, C++, Fortran ;
- Bonnes connaissances en calcul parallèle : algorithmique, MPI, Threads;
- Maîtrise de l'anglais technique et scientifique ;
- Rigueur, autonomie, adaptabilité, organisation ;

Une connaissance du calcul scientifique haute performance sera appréciée. Dans ce cas, la lettre de motivation en fera explicitement mention.

Duration: 12 months renewable 1 time

Location: Talence

Targeted hiring date: 15/10/13

Salary: 2530 € gross not negotiable

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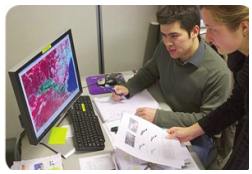
Job opportunity
Engineer R & D



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Research team

The **manao** project aims at **studying how light, matter and shape act together** in synergies, at the **convergence of Optical Science and Computer Graphics**, providing for more powerful representations of appearance. Such a high-level approach is to contrast with the main trend of modern Computer Graphics that study light, shape and matter separately.

http://manao.inria.fr/

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Assignement

The objective of the position is to gather recent research work from manao and Maverick research teams under a single library. This will not only permit to provide these techniques to the computer graphics community (in Open Source), but also to combine and adapt them to specific commercial needs in the form of plugins.

The development will be organised in three stages that will overlap in time:

1. Creation of a modular library sonsisting of shading tools for vector drawing, 3D rendering and image processing;
2. Integration and combination of modules into an OpenSource nodal software used for demonstration purposes;
3. Commercial plugin development (Modo, Nuke, Substance, Illustrator, MeshLab, Patchwork3D).

Keywords shading, real-time, 3D rendering, vector drawing, design, visual effects, video games

Qualification & experiences

Ingénieur Confirmé : To be at least an engineering graduate or having equivalent qualification and to have from 2 to 7 years' software development experience

Skills & qualities

3D Programming (C++, OpenGL) - GPU languages (GLSL,CUDA, etc) - Miscellaneous tools (Qt, Doxygen) - Knowledge in mathematics (linear algebra, vectorial calculus) - Good level in English - Team work - Video & web site design

Duration: 12 months renewable 1 time

Location: Talence

Targeted hiring date: 15/10/13

Salary: 2600 to 3500 € gross based on experience

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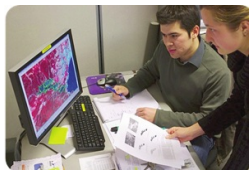
Grenoble

Job opportunity
Engineer R & D



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Research team

The project-team E-MOTION aims at developing algorithmic models and methods giving robots some capacities of perception, decision, and action sufficiently advanced and robust to allow them to operate in open and dynamic environments, and leading to varied interactions with human. Applications are studied on intelligent vehicles, people assistance.

https://team.inria.fr/e-motion/en

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Assignement

The engineer will concentrate on the developpement of a navigation and autonomous driving system that will work on several robotics platforms (robotic wheelchair for examples). The first objective will be to adapt the code of different teams involved in the project so that it works on the various platforms of the teams. The engineer will work in collaboration with several engineer and phD students. Various domains will be tackled: perception, planning, navigation and control.

Programming will be do in C++ under ROS operating system.

Keywords Robotics, autonomous navigation

Qualification & experiences

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

Skills & qualities

C++

Linux

Robotics

Computer vision

Path Planning

Duration: 12 months renewable 1 time

Location: INRIA Montbonnot

Targeted hiring date: 15/10/13

Salary: 2530 € gross not negotiable

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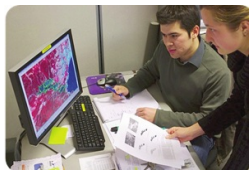
Job opportunity
Engineer R & D



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Research team

IMAGINE stands for: "Intuitive Modeling and Animation for Interactive Graphics & Narrative Environments". The challenge we aim to address is the efficient, interactive creation of animated 3D content. To this end, our goal is to develop a new generation of knowledge-based models for shapes, motion and virtual cinematography.

https://team.inria.fr/imagine/

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Contact Ressources Humaine
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Assignement

This work takes place in a project toward the exploitation of a collection of human anatomical models, to allow users to easily model humans parameterizable in age, gender, size, for multiple uses such as teaching or biomedical simulation.

The complete process is composed of three phases.
Medical images produced in Grenoble University Hospital will be used to automatically create an approximate 3D model of a person, using an anatomical transfer method developed in the IMAGINE research team.
After edition and validation by a team of morphologists (radiologists, anatomists, surgeons), it will be inserted in a collection of 3D models.
This set of examples will be used to build a statistical atlas representing a continuously parameterizable (age, size, etc.) model of the human body. The atlas will be created using the statistical modeling techniques developed in the MISTIS research team.
The parameterizable model will be publicly available through a web interface set up at INRIA.

Your goal is to design and to set up the chain of processing by selecting, adapting and combining the available tools: anatomical transfer, statistical methods, web server. You may advise interns, students and researchers working on the project. The main necessary abilities are a good knowledge of statistical methods, C++ programming, project management, as well as a taste for team work, to collaborate with the researchers, clinicians, engineers and students involved in this multidisciplinary project.
Knowledge in 3D geometry or image processing would be welcome, but the are not mandatory.

Keywords Modeling, statistics, health

Qualification & experiences

Ingénieur Confirmé : To be at least an engineering graduate or having equivalent qualification and to have from 2 to 7 years' software development experience

Skills & qualities

Statistics, Programming, Team work

Duration: 12 months renewable 1 time

Location: Montbonnot Saint Martin

Targeted hiring date: 15/10/13

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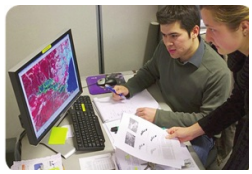
Job opportunity
Engineer R & D



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Contact Ressources Humaine
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Knowledge in 3D geometry or image processing would be welcome, but the are not mandatory.

Keywords Modeling, statistics, health

Qualification & experiences

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Skills & qualities

Statistics, Programming, Team work

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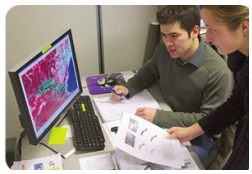
Job opportunity
Engineer R & D



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Research team

The NANO-D group develops SAMSON, a generic, open software platform for computational nanoscience (SAMSON: Software for Adaptive Modeling and Simulation Of Nanosystems: http://nano-d.inrialpes.fr). SAMSON's open architecture makes it easy for users to extend its functionalities, and makes SAMSON a priori applicable to all domains of nanoscience: structural biology, chemistr, materials, etc.

http://nano-d.inrialpes.fr

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Assignement

The successful candidate will be in charge of the complete development of the "SAMSON Store", to distribute SAMSON and its modules. This site, inspired from well know online stores typically associated to smartphones (iTunes / App Store, Google Play, etc.), will make it possible for users and developers of SAMSON to exchange modules, nanosystems models, simulation results, scripts, etc.

Keywords Web developement, databases, online stores

Qualification & experiences

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

Skills & qualities

- Development of web sites and applications

- C++ and Qt

- Excellent communication skills (written and oral)

- Excellent English level

Duration: 12 months renewable 1 time

Targeted hiring date: 15/10/13

This offer is available from 22/04/13 to 27/09/13

Location: INRIA Grenoble - Rhône-Alpes - Antenne MINATEC

Salary: 2530 € gross not negotiable

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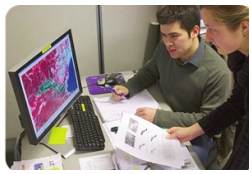
Lille

Job opportunity
Engineer R & D



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Research team

The main focus of Modal is to design generative models dealing with complex multivariate and/or heterogeneous data.

http://www.inria.fr/equipes/modal

Contact Scientifique
christophe.biernacki@inria.fr

Contact Ressources Humaine
Karine.Leroy@inria.fr

Assignement

The engineer will achieve developments and scientific experiments within the Modal team. His mission is divided into several successive steps :

- implementing an efficient and scalable C++ library included fundamental units of model-based clustering for mixed descriptors, namely currently available models within the team (Gaussian, multinomial, functional, intervals, ranks, ordinal), the generic estimation algorithm SEM-Gibbs and the standard criteria for model selection (BIC and ICL) ;
- associated to this library, designing an “online” web demonstrator on the website of the team;
- associated to this library, designing an R package and deposit on the CRAN;
- associated to this library, designing a simplified GUI;
- contributing to the organization of a special session to the great French statistical conference in 2015 at Lille (500 to 600 participants) for presenting the new library and its associated packages.

The engineer will contribute to tasks of development and experiments within the team. In particular, he will be concerned by :

contributing to design useful developments with associated implementation, tests and documentation ;

- contributing to technical decisions (software architecture, development tools, ...) in accordance with the scientific responsible, keeping in mind the required scalability for further integration of future new « homogeneous » models derived from next research ;
- provide assistance to users ;
- proposing ideas for improving software ergonomics ;
- optimizing the computational core (computing time improvement).

Keywords clustering, statistical learning, C++, R

Qualification & experiences

Ingénieur Confirmé : To be at least an engineering graduate or having equivalent qualification and to have from 2 to 7 years' software development experience

Skills & qualities

- Computer training validated by significant experience;
- Knowledge of software development and related tools (version manager, compilation, documentation, testing, debugging, ...);
- Programming languages : good skill in C++
- Good knowledge in R and also in web computing ;
- Good English level (technical ans scientific) ;
- Good writing skills;
- Skills or abilities appreciated: Statistics, Data Analysis

Duration: 12 months renewable 1 time

Location: Villeneuve d'Ascq

Targeted hiring date: 15/10/13

Salary: 2600 to 3500 € gross based on experience

This offer is available from 05/04/13 to 27/09/13

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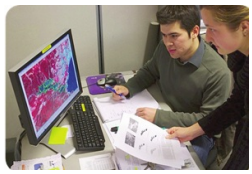
Job opportunity
Engineer R & D



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Research team

The project-team ADAM (Adaptive Distributed Applications and Middleware) deals with the concepts and tools for the adaptation of applications and middleware in distributed multi-scale environments.

With the increasing need of self-managed systems and the emergence of multi-scale environments, software developers need to cope with variability. Software must be developed to be adapted and reconfigured automatically on heterogeneous platforms in accordance with the unavoidable evol

http://adam.lille.inria.fr/

Contact Scientifique
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Contact Ressources Humaine
karine.leroy@inria.fr

Assignement

The engineer position is proposed to sustain the development of an innovative software solution for estimating the energy consumption across an application and monitor in real time the evolution of consumption. This software solution is positioned in the field of Green IT (Green Computing) and allows users to better understand how the applications running on their machines consume energy without the need for any external hardware device (eg, powermeter).

The engineer will therefore contribute to developments and scientific experiments carried out within the research team ADAM. The mission of the engineer will focus on the consolidation and extension of software PowerAPI and Jalen actively participating in the following tasks:

- Software development and experimentation: design, coding, testing, documentation;
- Participation in technical choices (programming languages, software architecture, development tools...) with the chief scientist, after studying the current situation;
- Writing documentation for users and support them;
- Demonstrations and presentations of results at conferences and national and international exhibitions related to academic communities and industrial;

Participation transfer to industry

Keywords consommation énergétique, génie logiciel, Akka.

Qualification & experiences

Ingénieur Jeune Diplômé : To be an engineering graduate or having equivalent qualification - To have obtained diploma in 2011 or 2012

Skills & qualities

- Computer training and knowledge of software development and related tools (version control, compilation, documentation, testing, debugging...);
- Programming languages: Java, JavaScript
- Good knowledge of XML, HTTP, JSON
- Taste for technological innovation
- Fluency in English technical
- Good writing skills

Skills and abilities assessed: Scala, Akka, REST, JavaFX, Maven, Jenkins

Duration: 12 months renewable 1 time

Location: Villeneuve d'Ascq

Targeted hiring date: 15/10/13

Salary: 2530 € gross not negotiable

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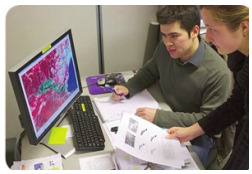
Job opportunity
Engineer R & D



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Research team

The team Dolphin (dolphin.lille.inria.fr) aims to model and solve large scale combinatorial optimization problems (multi-objective).

http://dolphin.lille.inria.fr/

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Contact Ressources Humaine
Karine.Leroy@inria.fr

Assignement

The proposed engineer position aims at providing all the required elements to test and evaluate multi-objective algorithms for data mining via a web platform. This platform will provide data sets (literature + artificial benchmarks), methods of data pre-processing, data mining algorithms based on multi-objective metaheuristics, methods of post-processing and validation.
The purpose of the mission is to enable:
- to have a repository of the results of the team DOLPHIN and making them available to the community,
- to propose any user to compare their own methods with different approaches according to well identified protocols,
- to provide a demonstration tool showing the interest and relevance of multi-objective data mining for industrial applications.

The engineer will participate to a development and experimentation task in a research team. This will lead him to undertake the following activities:
• Software development and experimentation: design, coding, testing, documentation;
• Participation in scientific and technical discussions (modeling choice, software architecture, functionalities, etc.).
• Communication with the scientific community (forum, mailing list, presentations).

Keywords Combinatorial optimization, datamining, Multi-objective optimization, Web technology.

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 should have good programming skills including C / C + +. Knowledge in data mining and combinatorial optimization can be interesting but may be acquired during the first months. It will be necessary that the engineer communicates both within the team with various project members and externally with academics from different nationalities.

Thus the desired profile is as follows:

- Master in computer science and knowledge in computer software development and related tools

(version controling, compilation, documentation, testing, debugging, ...);

- Programming Languages: C + +
- Fluency in technical and scientific english
- Fluency in technical and scientific French
- Good writing skills
- skills or abilities appreciated:

o Combinatorial Optimization
o Data Mining

Duration: 12 months renewable 1 time

Location: Villeneuve d'Ascq

Targeted hiring date: 15/10/13

Salary: 2530 € gross not negotiable

This offer is available from 05/04/13 to 27/09/13

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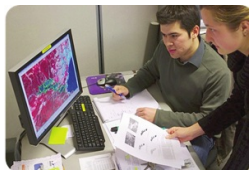
Job opportunity
Engineer R & D



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Research team

Medical simulation Patient-specific modeling Per-opertive guidance Patient-specific pre-operative planning

http://www.inria.fr/equipes/shacra

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Assignement

You'll be involved in our software quality process (unit tests, continuous integration, bug tracking, usability,...), you'll take part in new features development.
You'll help to promote SOFA in the scientific community, and take part in user-support.
SOFA is a software platform developped and used in several research teams, in different Inria reserch centres in France ; therefore you'll have to meet various scientific contexts and move to other Inria centers during your mission.
Activities :

- Software maintenance
- New features development
- Unit tests implementation
- Users and researchers support

Keywords C++ - software quality - continuous integration

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 and programming skills, and use of the corresponding tools (version-control systems, building, documentation, tests, debugging, ...)
- Good programming skills : C, C++
- GNU/Linux, MacOS and/or Windows environment
- Geographic mobility

Duration: 12 months renewable 1 time

Location: Lille / Strasbourg

Targeted hiring date: 10/04/13

Salary: 2530 € gross not negotiable

This offer is available from 10/04/13 to 27/09/13

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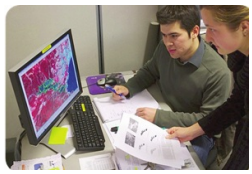
Job opportunity
Engineer R & D



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Research team

IMAGINE stands for: "Intuitive Modeling and Animation for Interactive Graphics & Narrative Environments". The challenge we aim to address is the efficient, interactive creation of animated 3D content. To this end, our goal is to develop a new generation of knowledge-based models for shapes, motion and virtual cinematography.

https://team.inria.fr/imagine/

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Assignement

This job takes place in the development of SOFA, the reference open-source simulation library for interactive mechanical simulation, mainly targeted to medical applications.

After training on collaborative development tools and methods, you will contribute to the integration and maintenance of novel functionalities proposed or needed by researchers, such as new physical models, new collision detection algorithms, and user interfaces.

You will be highly involved in the development of tools and methods for the project management (unitary tests, guidelines, bug tracking), as well as the dissemination of SOFA and the help to new users. This includes the enhancement and the presentation of high-end demos of real-time medical simulations.

This project is scheduled on two years, and the availability of the applicant to spend the second year in the ASCLEPIOS team in INRIA - Sophia Antipolis would be appreciated.

Keywords Software development, C++, Simulation, Healthcare

Qualification & experiences

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

Skills & qualities

- C++ programming
- Code development: coding, debugging, tests, documentation
- Basic knowledge in Computer Graphics

Duration: 12 months renewable 1 time

Location: INRIA Montbonnot

Targeted hiring date: 15/10/13

Salary: 2530 € gross not negotiable

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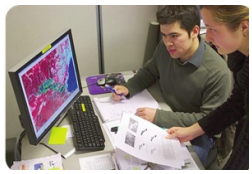
Nancy

Job opportunity
Engineer R & D



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Research team

The ALGORILLE team develops a set of tools for experimentation on distributed systems. Kadeploy enables the efficient reinstallation of a large number of machines to provide experimenters with customization of the experimental environment. The Distem emulator can alter the experimental conditions. Finally, XPFlow is an experiment management framework to orchestrate large scale and complex experiments.

http://algorille.loria.fr/

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Contact Ressources Humaine
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Assignement

In collaboration with the researchers and engineers of the ALGORILLE team, the engineer will be in charge of the further development of Kadeploy, Distem and XPFlow. His/her work will focus specifically on the extension of Distem to facilitate conducting experiments at larger scale (modification of the networking infrastructure to use virtual networks based on OpenVSwitch), in the context of Cloud computing (support of KVM in addition to LXC), and in the field of high performance computing (support of high-performance networks ; emulation of more node properties).
The engineer will also continue the convergence between those existing software tools by designing a library to gather some common features like the efficient execution of commands at large-scale, or the handling of large volumes of distributed data. He will also be in charge of release management for those tools.
He will be associated to scientific publications on those tools.

Keywords experimentation, large scale distributed systems

Qualification & experiences

Ingénieur Confirmé : To be at least an engineering graduate or having equivalent qualification and to have from 2 to 7 years' software development experience

Skills & qualities

Mandatory:
- System and network programming on Linux
- Software development practices and tools, in a Linux environment
- Interest for research

Appreciated:
- Experience with Ruby programming
- Former experience with experimentation, preferably in the context of distributed systems (Cloud, HPC, P2P, Grids)
- Performance evaluation, statistics
- Technical and scientific English

Duration: 12 months renewable 1 time

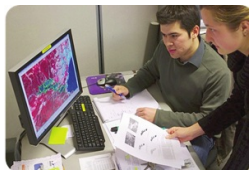
Location: Nancy

Targeted hiring date: 01/10/13

Salary: 2600 to 3500 € gross based on experience

This offer is available from 07/04/13 to 30/09/13

Job opportunity
Engineer R & D



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Research team

The NeuroSys team aims to understand the dynamics of neural systems using a systems neuroscience approach. The team develops neural models and data analysis tools bridging the gap between microscopic or mesoscopic modifications in neural systems and macroscopic changes in behavior.

http://neurosys.loria.fr

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Assignement

Software development and programming for OpenViBE (http://openvibe.inria.fr).
OpenViBE is an open-source software platform to design and use brain-computer interfaces.
Brain-Computer Interfaces enable a user to send commands to a machine or a computer using brain activity only.

The main tasks of the engineer will be:
1) to implement new machine learning modules;
2) to enhance the interoperability between OpenViBE and other programs in the field;
3) to contribute to the support and dissemination of OpenViBE.

Keywords Brain-Computer Interfaces; C++; OpenViBE; machine learning, software interoperability

Qualification & experiences

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

Skills & qualities

Background in computer science;
Ability to understand and exploit pre-existing software;
Programming language: C++, Matlab;
Good knowledge of software development approach and tools (debug, test, build, versioning, documentation);
Good knowledge of technical and scientific English;
Good knowledge in machine learning (multiclass classifiers, regression, learning theory, performance evaluation, etc.).

Duration: 12 months renewable 1 time

Location: Nancy - Grand Est

Targeted hiring date: 15/10/13

Salary: 2530 € gross not negotiable

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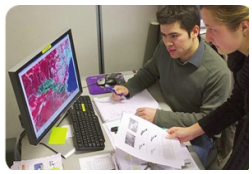
Job opportunity
Engineer R & D



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Research team

Our project aims at automatically processing speech signals to understand their meaning, or to analyze and enhance their acoustic structure. It comes within the perspective of building efficient vocal interfaces and requires works in the fields of analysis, perception and automatic recognition of speech.

http://parole.loria.fr

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Contact Ressources Humaine
michele.schneider@inria.fr

Assignement

The objective of this project is to develop software that allows processing, analyzing, data visualizing and articulatory synthesis. This software allows investigating the acquired data by an articulograph, which is an acquisition platform of articulatory measurement that allows tracking the position of small electromagnetic coils glued on the tongue, lips, incisors, etc. This software will permit processing the articulograph raw data, visualizing and proposing tools for post-processing (correcting acquisition errors, improve the quality of trajectories, etc.). This software provides several tools to better visualize and fully exploit the articulatory data (possibility of automatic segmentation, improving opportunities for 3D visualization). The software will also provide a demonstration module to generate articulatory synthesis from text. The vocal tract will be animated using articulatory data and by generating the corresponding acoustic signal.

Keywords Visualization, articulograph, trajectory optimization, articulatory synthesis, vocal tract animation

Qualification & experiences

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

Skills & qualities

- Excellent knowledge of Java.
- Good knowledge of C / C + +.
- Good knowledge of optimization algorithms, mathematics and geometry.
- Good knowledge in signal processing.
- Knowledge of Matlab would be appreciated.

Duration: 12 months renewable 1 time

Location: Nancy

Targeted hiring date: 01/09/13

Salary: 2530 € gross not negotiable

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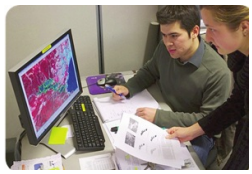
Rennes

Offre d'emploi
Ingénieur R & D (H/F)



Les technologies numériques sont à l'origine de nouveaux services, transforment en profondeur nos modes de vie et enrichissent notre quotidien. Inria est, en France, le seul institut public de recherche entièrement dédié aux sciences du numérique. 400 ingénieurs R&D accompagnent au quotidien les chercheurs dans leurs travaux, en développant des logiciels et des outils pour faciliter leurs recherches, en mettant en place des plateformes technologiques d'expérimentation.

Vous souhaitez collaborer à des projets de recherche ou à des actions de développement dans des technologies avancées ? Rejoignez-nous !

Équipe de recherche

Grid'5000 est une infrastructure pour l'expérimentation des systèmes parallèles et distribués à grande échelle composé de plus de 1000 nœuds disposant de plus de 8000 cœurs de calcul réparti sur une dizaine de sites. L'équipe technique est chargée de l'administration de l'ensemble des services, serveurs et de l'infrastructure réseau pour permettre des expériences innovantes.

https://www.grid5000.fr

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Mission

La mission consiste à développer et à maintenir en condition opérationnelle les logiciels mettant en oeuvre l'API REST permettant d'utiliser Grid'5000. Ces logiciels sont mis en oeuvre à l'aide de Ruby on Rails ou Sinatra et sont associés pour quelques uns à une interface web développée au-dessus de jquery.

Les développements à réaliser visent à permettre aux utilisateurs l'exploitation de toutes les possibilités de Grid'5000 et l'adaptation des logiciels aux évolutions des possibilités offertes par les bibliothèques qu'ils utilisent

Mots clés Developpement, Ruby, REST, javascript, jquery

Expérience et formation requises

Ingénieur Jeune Diplômé : Justifier d'une qualification équivalente à celle d'un ingénieur Avoir obtenu son diplôme en 2012 ou 2013 (sauf exception argumentée)

Compétences et Profil recherchés

- Formation en informatique et connaissances du développement logiciel et des outils associés (gestionnaire de versions, documentation, tests, débogage, ...) ;
- Langages de programmation : Ruby, Javascript;
- Bonnes connaissances en systèmes distribués
- Maîtrise de l'anglais technique et scientifique
- Bonnes aptitudes rédactionnelles ;
- Compétences ou aptitudes appréciées : linux, devops

Durée du contrat : 12 mois renouvelable 1 fois

Lieu de travail : Rennes

Date prévisionnelle d'embauche : 15/10/13

Salaire : 2530 € brut non négociable

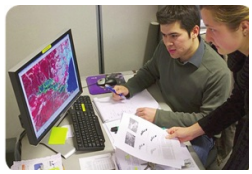
Cette offre est valable du 22/04/13 au 27/09/13

Pour candidater, veuillez vous rendre sur le site http://www.inria.fr/ijd

Pour information, sécurité défense

Dans le cadre de la protection de son patrimoine scientifique et technologique, Inria fait partie des établissements à régime restrictif. A ce titre, il applique une réglementation d'accueil pour tout futur collaborateur de l'institut. Le recrutement définitif de chaque candidat est donc conditionné à l'application de cette procédure de sécurité défense.

Job opportunity
Engineer R & D



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Research team

The ASAP Project-Team focuses its research on a number of aspects in the design of large-scale distributed systems. Our work, ranging from theory to implementation, aims to satisfy the requirements of large-scale distributed platforms, namely scalability, and dealing with uncertainty and malicious behaviors.

http://www.irisa.fr/asap/

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myriam.vinouze@inria.fr

Assignement

The goal of this project is to define and implement a library that will simplify the development of peer-to-peer applications among web browsers. The selected candidate will first work on a transport layer based on WebRTC. This layer will provide a common framework for a number of potential applications. The work will then continue with the development of a software library, specifically designed to support browser-to-browser peer-to-peer applications. During the second year, the candidate will work on a more specialized library designed to support gossip-based applications, along the lines of the existing GossilLib (gossiplib.inria.fr). Once this part has been completed, we will dedicate the final months to the development of prototype applications in areas such as recommendation, notification, social networks, video streaming, and electronic voting. The work will be carried out in close collaboration with another young engineer in the DICE team of INRIA Grenoble.

Keywords peer-to-peer, HTML5, social networks, streaming, electronic voting

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: Java, Multithreading, Coffeescript / Javascript, AngularJS

- Network Architectures: Pair à pair, WebRTC

- Misc: Web Browsers, Social Networks, nodeJS, OAuth

Duration: 12 months renewable 1 time

Location: INRIA Rennes

Targeted hiring date: 15/10/13

Salary: 2530 € gross not negotiable

This offer is available from 22/04/13 to 30/09/13

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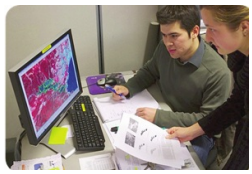
Job opportunity
Engineer R & D



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Research team

The ALF team regroups researchers in computer architecture, software/compiler optimization, and real-time systems. The long-term goal of the ALF project-team is to allow the end-user to benefit from the 2020's many-core platform.

http://www.irisa.fr/alf/

Contact Scientifique
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Contact Ressources Humaine
myriam.vinouze@inria.fr

Assignement

The engineer will carry on scientific development and experiments in a research team. He/she will integrate a set of parallel computing applications from various sources inside INRIA, in order to build an autonomous benchmark suite. Benchmarks reproduce the performance features of initial applications, but their users need no domain-specific knowledge. The benchmark suite will provide a tool for researchers in computer architecture, compilers or systems to evaluate hardware and software changes.

Keywords Benchmarks, parallel computing, integration, performance analysis

Qualification & experiences

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

Skills & qualities

- Background in computer science/computer engineering. Knowledge in software development and tools (version control systems, compilers, documentation, tests, debugging...).
- Programming languages: C, C++, scripting languages.
- Familiarity with compilation tools under Unix (makefile, autotools, SCons, CMake...)
- Knowledge of one parallel programming model (multi-threading, OpenMP, MPI, CUDA...)
- Good writing and communication skills.
- Familiarity with profiling tools, or Fortran programming is a plus.

Duration: 12 months renewable 1 time

Location: INRIA Rennes

Targeted hiring date: 01/11/13

Salary: 2530 € gross not negotiable

This offer is available from 18/04/13 to 30/09/13

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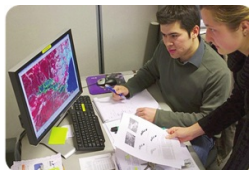
Offre d'emploi
Ingénieur R & D (H/F)



Les technologies numériques sont à l'origine de nouveaux services, transforment en profondeur nos modes de vie et enrichissent notre quotidien. Inria est, en France, le seul institut public de recherche entièrement dédié aux sciences du numérique. 400 ingénieurs R&D accompagnent au quotidien les chercheurs dans leurs travaux, en développant des logiciels et des outils pour faciliter leurs recherches, en mettant en place des plateformes technologiques d'expérimentation.

Vous souhaitez collaborer à des projets de recherche ou à des actions de développement dans des technologies avancées ? Rejoignez-nous !

Équipe de recherche

Le programme de recherche de l'équipe Celtique vise à proposer des méthodes de certification de logiciels à l'aide d'analyse statique. Les techniques d'analyse statique permettent d'obtenir une description approchée du comportement d'un logiciel (valeurs et relations entre entités numériques, flot de contrôle, état de la mémoire) et, si l'approximation s'avère suffisament fine, de prouver formellement que le logiciel

http://www.irisa.fr/celtique/

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Contact Ressources Humaine
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Mission

L'équipe Celtique développe depuis plusieurs une bibliothèque OCaml, la plate-forme Sawja (http://sawja.inria.fr), permettant le développement d'analyseur statiques pour les programmes bytecode Java. Un analyseur statique est un outil automatique permettant de détecter certaines erreurs de programmation (exceptions impromptues, failles de sécurité, etc...) dans les programmes.

Le nouvel ingénieur collaborera avec les scientifiques de l'équipe Celtique pour adapter et étendre cette librairie à l'analyse de programmes pour la plate-forme Android. Il sera nécessaire de maintenir et étendre le code OCaml de Sawja et de mettre en place des jeux de tests et des cas d'études intéressants à partir des applications Android disponibles sur l'Android Market. Aucune connaissance préalable en analyse statique n'est requise.

Mots clés Android, Java, OCaml

Expérience et formation requises

Ingénieur Jeune Diplômé : Justifier d'une qualification équivalente à celle d'un ingénieur Avoir obtenu son diplôme en 2012 ou 2013 (sauf exception argumentée)

Compétences et Profil recherchés

- Formation en informatique et connaissances du développement logiciel et des outils associés (gestionnaire de versions, compilation, documentation, tests, débogage, ...) ;
- Langages de programmation : OCaml, Java
- Bonnes connaissances en compilation
- Maîtrise de l'anglais technique et scientifique
- Bonnes aptitudes rédactionnelles
- Compétences ou aptitudes appréciées : motivation pour apprendre des techniques de vérification de programme innovantes et aider à leur transfert vers l'industrie

Durée du contrat : 12 mois renouvelable 1 fois

Date prévisionnelle d'embauche : 15/10/13

Cette offre est valable du 19/04/13 au 31/12/13

Lieu de travail : Centre Inria Rennes - Bretagne Atlantique

Salaire : 2530 € brut non négociable

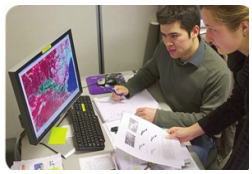
Pour candidater, veuillez vous rendre sur le site http://www.inria.fr/ijd

Pour information, sécurité défense

Dans le cadre de la protection de son patrimoine scientifique et technologique, Inria fait partie des établissements à régime restrictif. A ce

Rocquencourt

Job opportunity
Engineer R & D



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Research team

With digital equipment becoming increasingly networked, either on wired or wireless networks, for personal and professional use alike, distributed software systems have become a crucial element in information and communications technologies. The study of these systems forms the core of ARLES' work, which is specifically concerned with defining new system software architectures based on the use of emerging networking technologies. In this context, we concentrate on the study of distributed sys

https://www.rocq.inria.fr/arles/

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Assignement

We are looking for an engineer to complement our research on emergent middleware, by achieving the following objectives:

- Increasing the robustness of the following core emergent middleware enablers for public release by way of the OW2 FISSi initiative:
  - Universal discovery of resources, composing legacy discovery protocols,
  - Dynamic synthesis and deployment of mediators specified as enhanced labelled transition systems.
  - Editing the necessary users and developers guides.
  - Developing further the mediator synthesis enabler so as to support interoperability across heterogeneous interaction paradigms, as well as to enforce dependable interactions.
  - Experimenting with emergent middleware in the context of future Internet applications, and in particular federated social networking.

Keywords Middleware, protocol mediation, resource discovery, open source software.

Qualification & experiences

Ingénieur Confirmé : To be at least an engineering graduate or having equivalent qualification and to have from 2 to 7 years' software development experience

Skills & qualities

- Proficiency in Java and middleware technologies;
- Ability to analyse existing software codebase;
- Familiarity with software project management techniques and tools (version control, testing, etc.);
- Excellent command over English.

Duration: 12 months renewable 1 time

Location: Parus-Rocquencourt

Targeted hiring date: 15/10/13

Salary: 2600 to 3500 € gross based on experience

This offer is available from 24/04/13 to 30/09/13

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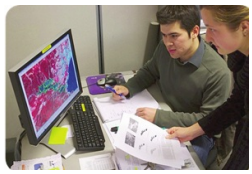
Saclay

Job opportunity
Engineer R & D



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Research team

OAK is a joint team between Inria Saclay and the LRI (Computer Science Research Lab) of Université Paris Sud. Our research is on models, languages, and algorithms for efficiently processing large-scale complex data.

The group is involved several data management R&D projects, including a KIC EIT ICT Labs collaboration with the Technical University of Berlin (Europa activity) and a newly-started French “Big Data / Cloud&

http://team.inria.fr/oak

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Mathilde.Prade@inria.fr

Assignement

The aim of CLOak is to consolidate, extend, and possibly disseminate a newly started software developed within Oak, for efficiently handling large volumes of Semantic Web data in a highly parallel environment, based on a parallel programming platform such as Google’s Map/Reduce (http://research.google.com/archive/mapreduce.html)

Keywords Cloud, map-reduce, databases, query optimization, parallel processing, Semantic Web data

Qualification & experiences

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

Skills & qualities

Good experience with Java programming is required

Good knowledge of a script language such as Ruby or Python is a plus

Experience or knowledge of distributed databases, distributed programming, in particular on Map/Reduce is a plus

Good organization and communication skills (French is optional, English is required)

Duration: 12 months renewable 1 time

Location: Université Paris Sud (Gif sur Yvette)

Targeted hiring date: 15/10/13

Salary: 2530 € gross not negotiable

This offer is available from 06/05/13 to 27/09/13

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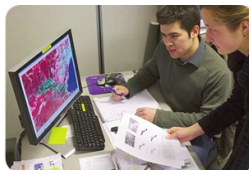
Job opportunity
Engineer R & D



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Research team

DISCO studies interconnected dynamical systems in complex environments.
The team wants to better understand and well formalize the effects of complex environments on the dynamics of the interconnections, as well as to develop methods and tools for the analysis and control of such systems.
In this context, delay systems and fractional delay systems represent selected classes of studied systems.&
http://www.inria.fr/equipes/disco

Contact Scientifique
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Mathilde.Prade@inria.fr

Assignement

The aim of this project is dual:

- Addition of HMI to the Matlab toolbox YALTA developed in the team. YALTA analyzes the stability properties of (fractional) delay systems.
- Design of a Simulink toolbox whih will implement controllers whose analytic expression has been given by YALTA.

Keywords HMI, Matlab, Simulink, Control of dynamical 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

Matlab, Simulink, HMI. Python appreciated.
Applied Mathematics
Control Theory

Duration: 12 months renewable 1 time

Location: SUPELEC

Targeted hiring date: 15/10/13

Salary: 2530 € gross not negotiable

This offer is available from 06/05/13 to 27/09/13

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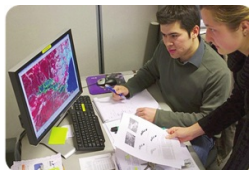
Sophia

Job opportunity
Engineer R & D



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Research team

The DIANA team, located at INRIA Sophia Antipolis - Méditerranée, conducts research in the domain of networking, with an emphasis on designing, implementing, and evaluating Internet protocols and applications. The main objective of the project-team is to propose and study new architectures, services and protocols that will enable efficient and secure communication through the Internet.

http://www-sop.inria.fr/planete/

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Contact Ressources Humaine
marie-line.ramfos@inria.fr

Assignement

The goal of this job is to implement an Android application to measure background radiations (GSM, 3G, LTE, Wifi, Bluetooth) observed by any Android smartphone. We aim to largely deploy this application to real users, therefore, special care should be taken for the user interface. The application quality (in terms of stability and user interface) must meet the highest standard.

In addition, the Android application will send the measurement results to a dedicated server that will compile and display (using modern HTML5 rendering) aggregated statistics to users.

Keywords Android, smartphone, background electromagnetic radiation, experimentations

Qualification & experiences

Ingénieur Confirmé : To be at least an engineering graduate or having equivalent qualification and to have from 2 to 7 years' software development experience

Skills & qualities

-Development of Android applications

-Modern and elegant user interface

-Knowledge of developpement tools (e.g. GIT, SVN, CMAKE, MAKE, etc...)

-Basic networking competencies (e.g., setting-up a client server architecture)

-HTML5, Ajax

-Flexibility, willingness to work in a research environment

Duration: 12 months renewable 1 time

Location: Inria Sophia antipolis - Méditerranée

Targeted hiring date: 15/10/13

Salary: 2600 to 3500 € gross based on experience

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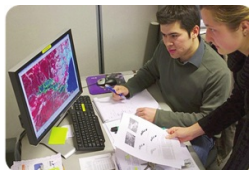

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Research team

The work will be carried out in the context of Action d'Envergure Inria Morphogenetics created in 2013, based on the collaboration of 3 Inria teams (Virtual Plants - project leader -, Morphème and Imagine) and 3 teams from Inra. The goal of Morphogenetics is to model the development of the young flower, based on the use of 3D imaging and computational models.

http://www-sop.inria.fr/virtualplants

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Marie-Line.Ramfos@inria.fr

Assignement

The goal of this work is to produce a software platform dedicated to the study and modeling of plant organs (meristems, leaves, floral organs, etc.) at the cellular scale. Based on a prototype of the platform Mars-Alt, a fully operational platform will be set up integrating advanced tools for live tissue imaging and interoperable with other major platforms for 3D imaging of biological tissue developed at Inria.

This work be twofold:

- Set-up a notion of computational 4D atlas in the platform Mars-Alt. The idea here is to use the 4D reconstructions of organs produced by the Mars-Alt algorithmic pipeline to map informations linked with the genetic and molecular activity observed in plant tissues.

- couple two software platforms developed at Inria: OpenAlea/Mars-Alt (Virtual Plants) et DTK (Dream ToolKit). This coupling will allow us to access directly as OpenAlea plugins the multitude of tools and widgets available in DTK and DTK components, and developed by the DREAM team et Inria.

Keywords 3D imaging, software engineering, 3D Atlases, Laser imaging, geometric modeling, software platform, tissues, 3D segmentation, big data

Qualification & experiences

Ingénieur Confirmé : To be at least an engineering graduate or having equivalent qualification and to have from 2 to 7 years' software development experience

Skills & qualities

Software engineering (architecture design, design patterns, versioning, tests, documentation tools, compilation ...), 3D imaging, geometric modeling, Big data, C++/Python

Duration: 12 months renewable 1 time

Location: Montpellier, France

Targeted hiring date: 15/10/13

Salary: 2600 to 3500 € gross based on experience

This offer is available from 22/04/13 to 08/09/13

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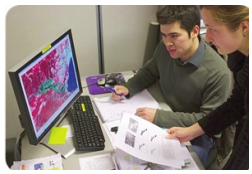
Job opportunity
Engineer R & D



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Research team

The team GraphIK is located in Montpellier at LIRMM (Laboratory of Informatics Robotics and Microeclectronics of Montpellier). GraphIK develops knowledge representation and reasoning languages, which rely on logics but also on graphs.The context of this mission is the issue of ontology-based data access, a key problem in the Semantic Web.

http://www.lirmm.fr/graphik

Contact Scientifique
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Contact Ressources Humaine
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Assignement

The aim is to develop a software platform for storing and querying data with respect to an ontology represented by existential rules (also known as Datalog+/-), with mappings from and to Semantic Web languages.

- Design of the platform architecture

- Recovery and intergation of existing code (data storage, parser, algorithms for processing rules)

- Implementation of translators from and to Semantic Web languages

- Implementation of algorithms

- Design and management of the platform website (online code, documentation, tutorials, etc.)

Keywords Software architecture - Semantic Web - Ontologies - Algorithms

Qualification & experiences

Ingénieur Confirmé : To be at least an engineering graduate or having equivalent qualification and to have from 2 to 7 years' software development experience

Skills & qualities

Experience in Java and Web technologies

Mastery of Software Engineering techniques and tools (architecture design, design patterns, versioning, tests, documentation tools, compilation ...)

Good knowledge of Semantic Web languages (RDF(S), OWL, SPARQL)

English required (technical reading, writing documentation, discussion)

Autonomy

Ability to work in a team, specially with researchers and doctoral students

Duration: 12 months renewable 1 time

Targeted hiring date: 15/10/13

This offer is available from 25/04/13 to 08/09/13

Location: Inria Sophia Antipolis - Méditerannée - sur site de Montpellier

Salary: 2600 to 3500 € gross based on experience

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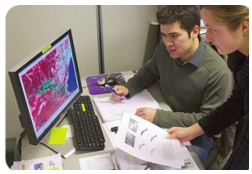
Engineer R & D



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Research team

The three main challenges of scientific data management can be summarized by:

1. scale (big data, big applications);
2. complexity (multi-scale data with lots of dimensions),
3. heterogeneity.

The overall goal of Zenith is to address these challenges, by proposing innovative solutions with significant advantages in terms of scalability, functionality, ease of use, and performance.

https://team.inria.fr/zenith/

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Assignement

The objective of the position is to participate in the development of SciFloware, a middleware for the execution of scientific workflows in a distributed / parallel way. We will build on our experience with the Shared-Data Overlay middleware Network (http://www-sop.inria.fr/teams/zenith/SON/) and an innovative algebraic approach to the management of scientific workflows.

SciFloware provides a development environment and a runtime environment for scientific workflows, interoperable with existing systems. We validate SciFloware with workflows for analyzing biological data provided by our partners CIRAD, INRA and IRD.

The engineer will participate in the development of specific middleware with its coordinate language of existing scientific workflows that run in the cloud.

Keywords Workflow, Cloud computing, Big Data

Qualification & experiences

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

Skills & qualities

Advanced Java development skills. Mastery of Software Engineering techniques and tools (architecture design, design patterns, versioning, tests, documentation tools, compilation ...). Good knowledge of Data Base, Fluency in English technical.

Duration: 12 months renewable 1 time

Location: Sophia-Antipolis

Targeted hiring date: 15/10/13

Salary: 2530 € gross not negotiable

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