

www.creatis.insa-lyon.fr

Job offer at Creatis laboratory: 30-month software engineer position



September 3, 2009



1 Context



The Virtual Imaging Platform (VIP) aims at developing an integrated platform to enable the execution of multi-modality medical image simulation. Four simulators will be integrated to simulate MRI (Magnetic Resonance Images), ultrasound, PET (Positron Emission Tomography) and CT (Computed Tomography) images. To face interoperability and compatibility problems, the VIP will rely on ontologies of the organ models, simulators, simulation processing and simulated images. To enable the computation of heavy simulations in a reasonable amount of time, VIP will be connected to computing clusters and grids, in particular the EGEE infrastructure¹, one of the largest distributed system in the world. In this context, we are looking for an engineer that will be responsible for VIP software development performed at CREATIS. The development will mainly consists of the following points:



• syntactic integration of the simulators in the platform, in collaboration with the simulator providers;

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• VIP execution service: server part enabling an efficient execution of largescale simulation experiments on the target computing platforms;



• VIP client: graphical user interface to the execution service, also integrating software from the semantic group.

In addition, he/she will provide support and assistance to the application task with the use of the VIP.

2 Profile

- Master-level with background in distributed systems and networking;
- \bullet Strong programming skills in Java and C/C++ including experience with software IDEs:

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Site Insa:

Insa - Bât. Biaise Pascal - 7 av. Jean Capelle 69621 Villeurbanne Cedex - France

Tél.: 33 (0)4 72 43 82 27 Fax: 33 (0)4 72 43 85 26

Fax: 33 (0)4 72 43 85 26 E-mail: prénom.nom@creatis.insa-lyon.fr Site Université Lyon 1 - CPE : ESCPE Aile C - 3, rue Victor Grignard 69616 Villeurbanne Cedex - France

Tél. : 33 (0)4 72 44 80 84 Tél. : 33 (0)4 72 68 49 09 Fax : 33 (0)4 72 68 49 16

Site Hospitalier :

Hőpital Louis Pradel - 28 av. du Doyen Lépine, 69677 Bron Cedex - France

Fax: 33 (0)4 72 68 49 16 E-mail: prénom.nom@creatis.univ-lyon1.fr

¹http://www.eu-egee.org/

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- Experience with SOA and grid technologies including Web-Services and/or Globus-Toolkit;
- Experience with gLite-based grids would be appreciated;
- Basic experience with medical image processing software would be appreciated:
- Two to three years of professional experience would be appreciated.

The position will start in January 2010 for 30 months. Salary according to CNRS standards 2 .





3 Contact / more information

Tristan Glatard CREATIS, Bât L. de Vinci 21 avenue Jean Capelle 69621 Villeurbanne cedex FRANCE glatard@creatis.insa-lyon.fr $+33\ 4\ 72\ 43\ 72\ 99$ http://www.creatis.insa-lyon.fr/~glatard





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Insa - Bât. Blaise Pascal - 7 av. Jean Capelle 69621 Villeurbanne Cedex - France

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²http://www.cnrs.fr/