PhD Position in medical image analysis based on grid networks, (Medical informatics, Geneva University and Hospitals)

Applications are invited for a position as a PhD candidate in the Medical Informatics Service, University and University Hospitals of Geneva, Switzerland. The successful applicant will join a team of researchers working on infrastructures, algorithms, and representations of medical knowledge using structured and unstructured textual data as well as images. The use of grid networks for the computationally intensive tasks of image analysis and retrieval are in the center of the work. The work will be carried out in the context of a European Union 6th Framework project called KnowARC. The middleware developed in the project will be based on the Nordugrid ARC middleware. The work carried out will consist in supplying adapting current image analysis applications towards grid-enabled applications and profit from the possibilities that grids offer to develop new applications. The work will include a close contact with infrastructure specialists at the University and the Hospitals to find ways to use grid infrastructures in large organizations and to avoid obstacles, for example regarding security issues.

The candidate is expected to have a Masters/Diploma degree in computer science, mathematics or a closely related field, and to have strong programming skills particularly on Linux platforms. Knowledge in image processing and/or grid networks is of advantage.

The expertise and experience of the ideal applicant should fit the following profile in decreasing order of importance:
- Programming skills;
- Linux knowledge
- experience with grid networks or middleware;
- image processing ;
- pattern recognition;
- machine learning;
- multimedia indexing;
- information retrieval.

Experience in software development using C/C++ and Java is important. Applications should include a letter of motivation, a curriculum vitae, and names and addresses of three referees. Applications by email are welcome. If sufficient mutual interest develops then referees will be contacted to ascertain suitability for the position.

For more information on the project or the application process please contact: henning.mueller@sim.hcuge.ch

LANGUAGE:
Good knowledge of either French or English is mandatory. French is the spoken language in Geneva so some knowledge of French is beneficial. The candidate should be willing to learn French.

ENVIRONMENT:
o medGIFT project: http://www.sim.hcuge.ch/medgift/
o Medical Informatics Service: http://www.sim.hcuge.ch/
o University of Geneva: http://www.unige.ch/
o City of Geneva: http://www.geneva-city.ch/
o French Alps: http://www.skifrance.fr/
o Canton of Valais and the high Swiss Alps (1.5 hours away)
o Central location in Europe:
  Traveling by train to Paris takes 3.5 hrs, Milano 4 hrs, and Zurich 3 hrs.
  The French border is never far away.
  The city is major centre for international organizations, such as UN and Red Cross, so transport links are excellent.

SALARY:
Geneva is a relatively expensive place, but the salary of a PhD student permits to cover all living costs easily.

DURATION:
The position is expected to start in June 2006, or as soon as possible afterwards.
Salary is guaranteed for 3 years with a continuation possible to finish the PhD if required.

APPLICATION:
Please send applications to:
Henning Müller
University & Hospitals of Geneva, Service of Medical Informatics
24, rue Micheli-du-Crest
CH-1211 Geneva 14, Switzerland
Fax +41 22 372-8680, Email: henning.mueller@sim.hcuge.ch