

Netherlands:Postdoctoral researcher in Process Project

The [Faculty of Science](#) holds a leading position internationally and participates in a large number of cooperative programs with universities, research institutes and companies. The faculty has around 6,000 students and 1,600 members of staff in eight research institutes and a diverse set of support services. Many projects are externally funded, either from Dutch and international sources both public and private. Since September 2010, the faculty resides in a new building at the Science Park in Amsterdam, one of the largest centres of academic research in the Netherlands.

The [System and Network Engineering \(SNE\) Lab](#) is one of the three largest research labs at the [Informatics Institute \(IvI\)](#) of the University of Amsterdam (UvA). The SNE Lab conducts research on leading-edge computer systems of all scales, ranging from global-scale systems and networks to embedded devices. Across these multiple scales our particular interest is on extra-functional properties of computer systems, such as performance, energy consumption, reliability, programmability, productivity, trustability, and security.

Project description

The PROCESS project has the objective to move the upcoming exa-scale data tools and technologies towards service-oriented computing and Cloud computing, while retaining their capacity to answer unprecedented data challenges and fulfil the requirements and constraints of existing simulation and computation packages. The PROCESS approach is to define and develop reliable and scalable techniques for service composition to enable application with ExaScale data sets, including both the infrastructure and user point of view. This combination of bottom-up and top-down approach aims at narrowing the gap between infrastructure services while addressing specific requirements of the most demanding cases, paving the way to future to future high capacity generations e-infrastructure.

The SNE Lab invites applications for a fully funded Postdoctoral position in the area of Exa-scale computing. More specifically, the Postdoctoral researcher will be involved in the research project 'PROviding Computing solutions for ExaScale Challenges (PROCESS)' which is funded by the EU Horizon 2020 program.

PROCESS aims to deliver a comprehensive set of mature services prototypes and tools specially developed to enable extreme scale data processing in both scientific research and advanced industry settings.

In this project, the candidate is expected to work on developing a data infrastructure, which takes advantage of the current state of the art European e-infrastructures landscape (EGI.eu, EUDAT, and PRACE). Among other tasks the candidate will have to perform the following tasks:

- develop methods to optimize data management and delivery in various scientific applications;
- develop data centric security mechanisms that will allow the creation of a secure and trusted environment for application with sensitive data.

Requirements

PhD in computer science or computer engineering;
prior expertise in one or more of the following fields: HPC, Big data platform, scientific Data processing;
fluency in oral and written English is required as well as good presentation skills;
strong programming skills in C, Java, Python and knowledge of Web Technology is;
able to guide PhD Student and work with a team of researchers;
work with a team of researchers.

Further information

Further information may can be obtained from:

Adam Belloum
T: +31 (0)20 525 7514

Appointment

The appointment will be full-time (38 hours a week). Initial appointment will be 9 months. Periodic evaluation will be held after 9 months and upon positive evaluation, the appointment will be extended to a total of 18 months.

The gross monthly salary will be in accordance with the university regulations for academic personnel, and will range from €2,588 up to a maximum of €4,757 (salary scale 10/11) based on a full-time appointment depending on qualifications, expertise and on the number of years of professional experience. There are also secondary benefits, such as 8% holiday allowance per year and the end of year allowance of 8.3%. The [Collective Labour Agreement for Dutch Universities](#) is applicable.

Some of the things we have to offer:

competitive pay and good benefits;
top-50 University worldwide;
one of the best deep learning ecosystems in the world;
interactive, open-minded and a very international city;
excellent computing facilities.

English is the working language in the Informatics Institute. As in Amsterdam almost everybody speaks and understands English, candidates need not be afraid of the language barrier.

Job application

Applications may only be submitted by electronic mail by sending your application to application-science@uva.nl. To process your application immediately, please quote vacancy number 17-522 in the subject line.

Applications must include:

a letter of motivation explaining why you are the right candidate;
curriculum vitae mentioning the months and years when referring to your education and work experience (including a link to your PhD Thesis);
recent projects related to the job opening (with brief descriptions of your contributions, max 2 pages)
recent publications related to the job opening.
you will also need to provide contact details for 2 referees. They will be contacted directly.

All these should be grouped in one PDF attachment.

The committee does not guarantee that late or incomplete applications will be considered. The selection process will consist of multiple rounds, during which (selected) candidates may also be asked to complete a programming challenge.

Applications not mentioning vacancy number and the title of the position you are applying for in the subject-line will not be processed.

Tentative Submission Deadline : 30 November 2017

[Further Information](#)