

# Netherlands:PhD candidate 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 PhD position in the area of exa-scale computing.

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 develop methods to optimize data management and delivery in various scientific applications.

## Requirements

MSC 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 highly appreciated;  
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) for a period of four years (initial employment is 18 months). Periodic evaluations will be held after 9 and 14 months, and upon positive evaluation, the appointment will be extended to a total of 48 months. The appointment must lead to a dissertation (PhD thesis). An educational plan that includes attendance of courses, summer and/or winter schools, and national and international meetings will be drafted for the PhD candidate. The PhD candidate is also expected to assist in teaching of undergraduate students.

The salary is in accordance with the university regulations for academic personnel. The salary will range from €2,222 (first year) up to a maximum of €2,840 (last year) before tax per month (scale P) based on a full-time appointment. 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](mailto:application-science@uva.nl) . To process your application immediately, please quote vacancy number 17-521 in the subject line.

Applications must include:

a letter of motivation explaining why you are the right candidate;  
curriculum vitae (including a link to your MSc Thesis);  
project related to the job opening (with brief descriptions of your contributions, max 2 pages);  
publications if any;  
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](#)