Universitat Pompeu Fabra Barcelona

CBC Center for Brain and Cognition

Center for Brain and Cognition
Departament de Tecnologies de la
Informació i les Comunicacions
Ramon Trias Fargas, 25-27
08005 Barcelona

Job offer: Linux system administrator

Theoretical and Computational Neuroscience Group, Center for Brain and Cognition, Universitat Pompeu Fabra

Description:

The Theoretical and Computational Neuroscience Group (http://gustavodecolab.com/) of the Center for Brain and Cognition, Universitat Pompeu Fabra offers a position in

Linux system administration for its **high-performance computer cluster**. Our cluster currently provides service to twenty users and consists of forty servers and approximately five hundred computational cores. The new administrator will install and maintain software and also monitor and solve problems regarding the cluster and its associated infrastructure. Emphasis will be placed on the automation and documentation of the administrative tasks.

Our cluster is used mainly to perform numerical simulations of models neural systems. The programs carrying out those simulations are written in Python, MATLAB or C++. We may eventually require the administrator to work on the optimization of those programs, once the administration tasks are sufficiently automated.

Required technical skills:

- Formal training on networking, computer architecture and operating systems.

- Knowledge of GNU/Linux systems at the administration level (regular use of command-line tools, configuration of TCP/IP networks and services, good grasp of the properties of networked and local filesystems and of standard security practices).

- Basic notions of optimization (multiprocess and multithread parallelism).

- Bash and Python scripting.

Desired technical skills:

- Previous system administration experience.

- Numerical/scientific scripting using Python (numpy, scipy) or MATLAB.

- C or C++ programming.

- Parallel programming on GPUs.

- Experience with batch execution systems (Sun Grid Engine or similar).

Other skills:

- Good communication skills (explaining simple procedures to users) and documentation skills (recording and justifying the decisions made).

- Good command of written and spoken English and Spanish.

- Proactive attitude for the resolution of problems and proposals of improvements to the software infrastructure. Center for Brain and Cognition Departament de Tecnologies de la Informació i les Comunicacions Roc Boronat, 138 (edifici Tànger) 08018 Barcelona

- Ability to self-train.

Employment conditions:

The selected candidate will work part-time (17.5 hours/week) under a reasonably flexible schedule. Gross salary: up to 10.560 euro/year. The position will be filled on by September 2017 and will be subject to a trial period of four months. The initial contract will last for 12 months, with the possibility to renew. It is desirable that the candidate lives in Barcelona area.

How to apply:

Send a CV and a brief motivation letter to pamela.miller@upf.edu preferably before August, the 31st, 2017, citing the reference "System Administrator" in the subject line. We will contact a reduced number of candidates in order to conduct personal interviews.