

**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://cns.upf.edu/>) 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.

- 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** (subjected to the reduction in salaries adopted by the Government as exceptional measures). The position will be filled on July/August of 2013 and will be subject to a trial period of four months.

The initial contract will last for 12 months, but the position will be stable for at least four years, since it is associated to an ERC-funded project (DYSTRUCTURE; project number 295129).

It is desirable that the candidate lives in Barcelona area.

**How to apply:**

Send a CV and a brief motivation letter to [miguel.lechon@upf.edu](mailto:miguel.lechon@upf.edu) preferably before June, the 28th, 2013, citing the reference "System Administrator" in the subject line. We will contact a reduced number of candidates in order to conduct personal interviews.