

GALICIA LAUNCHES ITS FIRST MASTER IN SUPERCOMPUTING

- **The first experts in High Performance Computing trained in Galicia will be able to apply these techniques in technological and industrial environments or academic research.**
- **Sectors such as finance, aerospace, automotive, wind energy, shipping or pharmacist and the Academia are very interested in personnel highly qualified in supercomputing.**

Santiago, August 3rd, 2010.- A Master in High Performance Computing (HPC) will be set for the first time in Galicia during the 2010-2011 year. Organized and taught by A Coruña University (UDC), Santiago de Compostela University (USC) and Galicia Supercomputing Center (CESGA), and sponsor by Bull and Hewlett Packard (HP), it aims to fulfill the **great demand of specialized professionals** for this discipline and its multiple applications, existing in universities, research centers and private sector.

Through joint projects, courses, congresses, networks and other initiatives, the USC and the UDC Computer Architecture groups have collaborated together with CESGA in HPC research and training fields. The creation of this new Master is the result of joint efforts and the knowledge of the need for specialisation in the sector.

NECESSARY NEW QUALIFICATION

Until the moment, there has not been any university degree with a specialization in High Performance Computing in the Galician community. That is the reason why this Master is especially aimed at degrees on engineering or experimental sciences and oriented to specialists working on R+D as well as to the continuous training of active professionals.

In the scientific sphere, those graduates obtaining this master will be qualified to work in multidisciplinary centers or research groups, being able to apply supercomputing techniques to technological and industrial environments for the improvement of quality and productivity. They will also learn to use the tools provided by supercomputers in order to solve the technical and scientific problems of their field of knowledge.

During the first four years, 25 places will be offered per year for full time (one year) or part time (two years) on-campus education.

Additionally, HP will sponsor (among other assistances) access to HP's employment exchange and to the selection process for the program Sales University in HP Spain, for those top students they might be interested in. Also, the commitment by HP Labs to integrate one of the best students in any of the international research programs available at that time, providing there's a match with the right profile and skills. Moreover, thanks to the Bull sponsorship, the best students will be able to access international supercomputing centers with leading Bull technologies.

INCREASING DEMAND OF EXPERTS

Supercomputing can be used for all that can be mathematically modelled. That is why the High Performance Computing (HPC) field and its applications has become

one of the most dynamic in the computing world, being recognized as primary both in EC framework programs and in Spanish research-funding projects.

Technological and scientific advances have generated a great demand of supercomputing professionals with high profile knowledge on systems administration and specialized in scientific computing infrastructures management. Currently, there are more than ten Computing centers with this kind of needs only in Spain, leaving aside universities computing areas, which also require this type of profile in fields such as High Performance Computing research (both computer architecture and tools as well as compilers and new algorithms) and its applications to other areas such as nanotechnology, life sciences, sea sciences and energy, which require their own computing tools and infrastructures in some cases.

However, it is the private sector the one which is ever more demanding this professional profile for finances, aeronautics, automotive industry, wind power, navy, pharmacy, electronics and life sciences in general. Already in 2004, the **Simula** study carried out by CESGA (<http://simula.cesga.es>) pointed out the urging need for training of the personnel qualified in the HPC used in business numerical simulation, increasingly needing more realistic models that demand more computing capacity.

Galicia Supercomputing Center (CESGA) is a Foundation co-funded by the Xunta de Galicia and the Spanish National Research Council (CSIC). Since its creation in 1993, CESGA has the goal of contributing to the advance of science and technique through research and application of high performance computing and communications in collaboration with other institutions for the welfare of society.

More information:

<http://gac.des.udc.es/master>

www.cesga.es

www.udc.es

www.usc.es