Barcelona Supercomputing Center (BSC)  
Spain

RTL Design and Validation Group Leader (R4)

- **Deadline:** Jan. 28, 2018
- **Career levels:** Associate Professor, Company Researcher, Engineer, Lecturer, Professor, Senior Researcher
- **Keywords:** Computer architecture, HPC / Exascale, Other

**Context and Mission:**

BSC are looking to add an exceptional computer architecture researcher to our team. The immediate responsibilities of the position will be related to The European Processor Initiative, which aims to design and execute a roadmap for a future European low power processor for HPC and automotive.

**Key Duties:**

Reporting to the directors of the BSC Computer Sciences Department, you will build and lead a team at BSC of at least 10 professionals.

In the immediate term, this team will be responsible for defining an architecture road map for a RISC-V accelerator to be used in conjunction with a general purpose processor for Exascale, which is being developed within the same European initiative. You will also be responsible for delivering this through a combination of internal and external research activities with various other partners. Collaborating closely with product development teams and a large network of external researchers in both industry and academia.

In the longer and possibly medium term the team will be expected to cover all of BSC’s RTL design and validation needs.

**Requirements:**

Education:

- MS degree or PhD in Computer Science / Computer Engineering is preferred

Essential Knowledge and Professional Experience:

- Professional research experience in industry or academia:
- In-depth knowledge of world-wide research activity in computer and software disciplines
- Regular contributor at professional conferences
- Experience of funded programs and research consortia
- Demonstrable experience in developing, executing, and disseminating research projects:
- Developing research project plans and strategies
- Communicating and collaborating with stakeholders
- Managing team members and project resources
- Strong architecture knowledge and analysis skills including:
- Architecture and microarchitecture expert of CPU, GPU, and vector processors.
- Microarchitecture RTL design and verification
- Expert in RTL design and verification development tools
- System performance analysis and simulation
- Experience with benchmarking and bottleneck/performance analysis
- Strong programming skills along with excellent problem-solving and debugging abilities

Competences:
- Excellent networking, communication and negotiation skills
- Excellent written and verbal communication skills in English
- Ability to work in a professional environment within a multidisciplinary and international team
- Ability to take initiative, prioritize and work under set deadlines and pressure
- Capacity to interact and build strong relations with a diverse members/stakeholder/staff base
- Operates effectively and openly in teams and shares both knowledge and success with others
- Builds strong and lasting relationships based on mutual trust
- Actively seeks out and encourages alternative viewpoints and ideas
- Applies critical thinking to select the best way forward
- Demonstrates a positive attitude in gaining insight from team experiences and is receptive to feedback
- Is passionate about the success of others and actively provides support for their development
- Listens and explores alternative perspectives before carefully shaping work that will deliver impactful results
- Persuades rather than pushes when influencing colleagues
- Acts with a thoughtful sense of urgency
- Demonstrates a helpful, can-do attitude
- Strives to achieve win-win outcomes for BSC and our partners

Conditions:
- The position will be located at BSC within the Computer Sciences Department
- We offer a full-time contract, a good working environment, a highly stimulating environment with state-of-the-art infrastructure, flexible hours, extensive training plan, tickets restaurant, private health insurance, fully support to the relocation procedures
- Salary: we offer a competitive salary according to the cost of living in Barcelona
- Starting date: asap

Applications Procedure:
All applications are done via BSC's website and must include:
- A motivation letter with a statement of interest, including two contacts for further references
- A full CV including contact details

Deadline:
- The vacancy will remain open until suitable candidate has been hired. Applications will be regularly reviewed and potential candidates will be contacted.

Diversity and Equal Opportunity Employment:
- BSC-CNS is an equal opportunity employer committed to diversity and inclusion. We are pleased to consider all qualified applicants for employment without regard to race, color, religion, sex, sexual orientation, gender identity, national origin, age, disability or any other basis protected by applicable state or local law.
About BSC:
The Barcelona Supercomputing Center - Centro Nacional de Supercomputación (BSC-CNS) is the leading supercomputing center in Spain. It houses MareNostrum, one of the most powerful supercomputers in Europe, and is a hosting member of the PRACE European distributed supercomputing infrastructure. The mission of BSC is to research, develop and manage information technologies in order to facilitate scientific progress. BSC combines HPC service provision and R&D; into both computer and computational science (life, earth and engineering sciences) under one roof, and currently has over 500 staff from 44 countries.

Look at the BSC experience:

- BSC-CNS YouTube Channel
- BSC-CNS Corporate Video
- Let's stay connected with BSC Folks!