Looking for new challenges in supercomputing?
Join our interdisciplinary team at ZIB!

ZIB

18.05.2020

The Supercomputing Department of the Zuse Institute Berlin (ZIB) is offering two positions at the earliest time possible:

High-Performance Computing Specialist (f/m/d)
Reference WA 38/20
100% - TV-L, E14.

The Zuse Institute Berlin (ZIB) is an interdisciplinary research institute for applied mathematics and data-intensive high-performance computing. Its research focuses on modeling, simulation and optimization with scientific cooperation partners from academia and industry. As part of its scientific service, ZIB operates supercomputers at the top performance level. The HLRN-IV system of the North German Supercomputing Alliance (www.hlrn.de) is a distributed supercomputer system operated at ZIB/Berlin and University of Göttingen. It enables scientists in Germany nationwide to perform complex computational and data-intensive tasks. With more than 200.000 compute cores, 800 TB distributed memory and 16 PB online persistent storage the HLRN-IV is among the top supercomputers in Germany. The Berliner HLRN-IV complex named "Lise" at ZIB provides today a peak performance of 8 PFLOP/s and is ranked at position 40 in the worldwide TOP500 list of supercomputers.

The applicant will join the HPC Consultants group at ZIB, working with code developers and users, and focusing on performance aspects of a broad range of workloads including data intensive workloads while extending the expertise of the group.

We are seeking for candidates who are highly motivated in working with innovative technologies and their efficient use on current and next-generation HPC architectures, and the HLRN user community.

Your Responsibilities:
- guide HPC users in the modernization of their application codes and in the transition to next-generation supercomputer architectures,
- support performance analysis of complex workflows on all levels (CPU, vectorization, caches, memory hierarchy, parallelization, load imbalance, scalability, network, local and global distributed storage),
- cooperate with HPC code developers and domain consultants on the code design to enable the efficient use of next-generation, e.g. heterogeneous HPC architectures,
- identify opportunities for trans- and inter-disciplinary work on data-focused aspects in HLRN user's projects,
- contribute to training activities for code developers and users,
- conduct own research in the respective field, including the acquisition of third-party funded projects,

- publish scientific results in international conferences and journals (travel will be supported by ZIB)

Candidates need to provide:
- a university degree and PhD in computer science or a related field,
- technical background on parallel computer architectures (many-core and vector processors, high-performance interconnects, memory hierarchies, and storage systems),
- expertise in parallel programming models (also for heterogenous platforms),
- experiences in runtime profiling and the use of performance analysis tools,
- good programming skills in C/C++ or Fortran, and Python,
- a basic understanding of parallel file systems and data intensive frameworks,
- a strong focus on self-responsibility, pro-activity, the ability to work in a team, and creativity.

We offer
a dynamic and state-of-the-art working environment and a family-friendly working atmosphere,

plus

- a future-proof workplace with a diverse area of responsibility,
- training and courses to develop and improve personal skills,
- additional pension schema (VBL),
- payment in accordance with TV-L (Collective Agreement for the Public Service of the federal states), taking into account the relevant professional experience and annual special payment,
- discounted use of the cafeterias and the sports activities offered by the Freie Universität Berlin (FUB).

The candidature of women is encouraged. Since women are underrepresented in information technology, ZIB is trying to increase the proportion of women in this research area.

Persons with disabilities will be given preference when equally qualified.

Please send your complete application with a tabular CV and the usual documents electronically by **15.06.2020** (date of receipt), quoting reference **WA 38/20** to: jobs@zib.de. Please send your documents as PDF only.

Our private policy statement regarding application data is available at www.zib.de/impressum.

For more information about the area of responsibility, please consult the HLRN webpage www.hlrn.de or contact Dr. Thomas Steinke (steinke@zib.de).

For further job offers please visit our website at www.zib.de.