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

28 June 2022

The Supercomputing Department of the Zuse Institute Berlin (ZIB) is offering a position at the earliest time possible, and initially limited in time until 31.12.2025 with the option of a permanent appointment as

High-Performance Computing Researcher in "Life Science" (m/f/d)
Reference WA 25/22
100% - TV-L Berlin, up to 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, machine learning and optimization with scientific cooperation partners from academia and industry. ZIB looks back to more than 30 years of experience as an HPC center and since January 2021, it is one of the nine centers of the nationwide HPC Alliance "NHR" (Nationales Hochleistungsrechnen, see www.nhr-verein.de) funded by the national government and the German Federal States. We operate compute and storage resources at the top level. Currently, our HPC system "Lise" with its 8 PFLOP/s peak performance provides a platform to realize demanding computational tasks and data analysis workflows to solve complex scientific questions. The "Lise" system comprises 120,000 compute cores, 500 TB distributed memory, and 8 PB persistent online storage.

We are looking for an experienced researcher with a proven expertise in HPC for the life sciences. Based on her/his own research in computational life science, the successful candidate will support life science projects in implementing their computational and data analytics workflows efficiently on NHR systems. The position requires interacting with researchers, code developers and HPC experts active in the broad scientific field of life science while keeping a focus on performance aspects of the current and next-generation technology platforms at the same time.

Your Responsibilities:

- Conduct own research in the computational life sciences, including publication of scientific results in international conferences and journals and acquisition of third-party funded projects,
- provide excellent HPC-focused support to the life science community in the realization of scientific projects on NHR HPC systems, including domain-specific software, best-practice solutions, and migration of code to next-generation supercomputer architectures,
- contribute to the NHR networking activities in the life science domain including training and workshops.

Candidates need to provide:

- A university degree with proven expertise in one of the life science areas, preferably multi-scale modeling and simulation of tissue, cellular or molecular systems, or in related data-based research,
- a doctoral degree / PhD would be favorable,
- longtime professional experience in this field of activity, such as
    - a good background in parallel programming (multi-threading, message passing), as well as experiences in programming accelerators (GPU, FPGA),
    - good technical knowledge of state-of-the-art parallel computer architectures (processors, high-performance interconnects, memory hierarchies, and storage systems),
- desirable is a basic understanding of parallel file systems and data processing frameworks for machine learning and AI,
- a strong focus on self-responsibility, pro-activity, the ability to work in a team, and creativity.

We offer a family-friendly working environment through flexible working and meeting times, excellent equipment and a challenging professional environment.

Additionally, we offer

- Access to next-generation HPC infrastructure,
- comprehensive training in a competent and cooperative team,
- an additional pension scheme (VBL),
- 30 days annual leave, flexible working hours (flexitime),
- a salary in accordance with TV-L (Collective Agreement for the Public Service of the Federal States), taking into account the relevant professional experience,
- an end-of-year bonus,
- discounted BVG (public transport) ticket as part of the capital city allowance,
- and the use of canteens and sports programs of the Freie Universität Berlin (FUB) at reduced rates.

Female applicants are highly encouraged to apply. Since women are underrepresented in information technology, the ZIB is trying to increase the proportion of women in this research area.

Applicants with disabilities will be preferred as long as equally qualified.

Please send your application, quoting the reference code **WA 25/22**, including a cover letter containing a statement of your research interests, your CV with a list of publications, academic transcripts and contact details of two references, by **25 July 2022** (date of receipt) as **one PDF** to jobs@zib.de

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

For further information on the area of responsibility, please contact Dr. Thomas Steinke (steinke@zib.de).

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