You are looking for an employer you can count on? Join us!

HPC Specialist (f/m/d)
for Parallel Programming Environments and Libraries

Your Role and Responsibilities:

- Installation, quality and performance verification of communication and message-passing libraries (MPI, Global Arrays, OpenShmem, OpenCoarrays etc.) on the LRZ HPC systems.
- Setting up tools, workflows and further development of a test suite for analysing, isolating and classifying performance and functional problems of the communication layer of the above-mentioned libraries.
- Support in the development of containerised solutions for parallel HPC applications.
- Error tracking for identified software problems (via manufacturer ticket systems).
- Improving the integration of the communication libraries with the SLURM stack processing system used at the LRZ.
- Ensuring the service quality of the parallel programming environment (especially after system maintenance).
- Preparation of the software environment for SuperMUC-NG Phase 2 with special consideration of the accelerator architecture used there.

Basic Qualifications:

- Applicants should have in-depth knowledge of at least one HPC programming language (C, C++, Fortran), as well as a basic understanding of all these languages.
- Experience with the use of UNIX/Linux-based programming environments (compilers, scripting languages, make, autoconf etc.) is required.
- Good knowledge of parallel programming (MPI, OpenMP) is expected.
- You like to share experiences and put procedures to the test in order to improve them with the team.

Preferred Qualifications:

- Experience with tools for source code management and automatic generation of applications with dependencies (e.g., Spack, Easybuild);
- Knowledge of testing frameworks like REFRAME or comparable tools;
- Gitlab/Github CI/CD;
- In-depth knowledge of the Message-Passing Interface (MPI) and middleware libraries;
- Knowledge of performance and correctness analysis tools;

Area	High Performance Computing
Working time	full time (40 hrs) / part-time possible flexible working model with electronic time recording
Term of the contract	24 months, a further employment is intended
Remuneration	up to E 13, see Entgelttabelle TV-L
Annual leave / compensatory time off	30 days (24.12. + 31.12. additionally day off) Overtime is compensated by additional time off
Further trainings	Individual support for in-service training and further education
Mobile work	up to 60% of work time, when applicable
Benefits	e.g. bus and subway (U6) on the doorstep, free parking, pension plan of the Versorgungsanstalt des Bundes und der Länder (VBL), state-of-the-art work equipment

What can you find with us?

Are you looking for a multifaceted and intellectually stimulating position in a dynamic, cooperative and innovative work environment? Then LRZ is the place to be for you! Here at LRZ a collegial, appreciative work environment meets an international crowd of experts who work together to advance IT services for ground-breaking research. We offer flexible work schemes for an optimal work-life balance. Our staff values their creative leeway. As an institute of the Bavarian Academy of Science and Humanities we offer all the benefits of public service. And of course, no wishes remain unfulfilled at the LRZ in terms of technical equipment. We share experiences, constantly review and improve our processes, and are proud that our service-quality and data-security are regularly certified and rated highly.
We actively promote diversity and welcome applications from talented individuals, regardless of cultural background, nationality, ethnicity, gender and sexual identity, physical abilities, religion and age. We give priority to applications from people with disabilities who are equally qualified (SGB IX).

The LRZ in a nutshell:
Since 1962, Bavarian universities and research institutions have relied on the IT expertise of the Leibniz Supercomputing Centre of the Bavarian Academy of Sciences and Humanities. When it comes to the digital transformation of science, we are traditionally ahead of the game.

We are looking forward to receiving your complete application documents (including cover letter, CV and certificates) in a single PDF file via e-mail (other file types are not accepted) by latest **06.05.2024**:

    E-Mail: jobs@lrz.de
    Subject: **Parallel Programming Environments (2024/21)**

Are you unsure whether the job suits you or you suit us? Or do you still have questions about this position? Our colleagues will be happy to answer all your questions at the above e-mail address.

This job does not fit? Then take a look at https://www.lrz.de/wir/stellen/ or send us an unsolicited application!

Here you will find information about the collection of personal data during the application process.