



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

# Large-Scale I/O and Data Expert (f/m/d) in HPC

## Your Role and Responsibilities:

- Evaluation and assessment of monitored I/O-patterns; diagnosing bottlenecks in the HPC infrastructure
- Maintenance and further development of Quality Control measures to assure performance and stability of the I/O subsystems
- Development of strategies for optimization and scaling of application-specific I/O patterns
- Integration of state-of-the-art object storage with HPC applications (specifically, using the DAOS subsystem on SuperMUC-NG phase 2)
- Deployment of I/O strategies for "Big Data" and AI scenarios on HPC systems
- certified, transparent processes

#### Basic Qualifications:

- PhD or university (post) graduate degree, diploma, master's degree or equivalent in a scientifically oriented subject (preferred are computational science or physics/mathematics)
- Good knowledge of principles and practices of I/O, both serial and parallel
- · Ability to lead scientific and technical efforts in HPC
- Good knowledge of systems programming (especially C/C++)
- Good knowledge and experience with scripting languages
- Experience with serial and parallel abstraction libraries (e.g., HDF5, NetCDF, MPI-IO), knowledge of I/O design for abstraction libraries
- Good oral presentation and writing skills in German and/or English
- You like to share experiences and put procedures to the test in order to improve them with the team.

### Preferred Qualifications:

- Basic knowledge of Fortran and MPI (message passing interface)
- Initiative, capacity for teamwork, and creativity
- Principles of Database usage
- Knowledge about Quality of Service methodologies

Area	HPC systems and services
Working time	full time (40 hrs) / part-time possible flexible working model with electronic time recording

Term of the contract	31.12.2025, 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 **12.01.2024**:

E-Mail: jobs@lrz.de

Subject: I/O expert job application (2023/48)

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 <a href="https://www.lrz.de/wir/stellen/">https://www.lrz.de/wir/stellen/</a> or send us an unsolicited application!

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





