



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

# System Engineer for Data-Driven Workflow Infrastructure and Databases (f/m/d)

## Your Role and Responsibilities:

Join us in the Research Unit / Research Data Management (RDM) team of LRZ! Our team provides solutions for Research Data Management in High-Performance and Cloud Computing, and facilitates data-driven workflows across different systems in our supercomputing centre and beyond. We are looking for a reinforcement in various current and upcoming projects, in particular the EU-funded (Horizon Europe) "Extreme Analytics for Mining Data Spaces" (<a href="www.EXA4MIND.eu">www.EXA4MIND.eu</a>) and "OpenWebSearch.EU". OpenWebSearch.EU aims to provide an Open Web Index, where LRZ contributes to the infrastructure framework and management. EXA4MIND facilitates data-driven workflows, bringing together optimum database and storage set-ups, supercomputing systems and European data sharing ecosystems. The RDM team's focus in these contexts is on the IT platform, on research (meta-)data management, and on data-flow orchestration.

## Your work will focus on:

- deployment, test and operation of database management systems and data middleware (iRODS, MinIO),
- maintenance of experimental storage and computing infrastructure, including the set-up of virtual machines and container-based services on VMWare, OpenStack and Kubernetes,
- modules to connect our services to European data-management platforms, e.g. European Data Spaces,
- support for pilot use cases,
- help with publications and reporting from the project, and with shaping follow-up research ideas.

### **Basic Qualifications:**

- master's degree (with thesis) or PhD in computer science, engineering or any natural science;
   alternatively bachelor's degree with thesis and 5 or more years of professional experience in IT
- familiarity with database management systems (strong experience with at least one SQL DBMS; basic knowledge of NoSQL databases such as Elasticsearch and MongoDB);
- system management and scripting:
  - o advanced knowledge of Linux and fluency on the Linux Command Line (bash),
  - o fluency in at least one further programming/scripting language (preferably Python),
  - basic familiarity with virtualization frameworks (Kubernetes, Openstack, Docker etc.),
  - o familiarity with object storage (in particular S3) and NFS;
- basic knowledge in design and implementation of RESTful web APIs;
- familiarity with source code management with git / gitlab / github; basic knowledge of CI/CD
- C1-level knowledge of English.

## Preferred Qualifications:

experience in administration of complex IT platforms,

- A2-level (or higher) knowledge of German,
- experience with simulation workflows in research, High-Performance Computing / Data Analytics (HPC/HPDA).

Area	FOR (Research and Development)
Working time	full time (40 hrs) flexible working model with electronic time recording
Term of the contract	up to 31/12/2025; we aim to make follow-up projects possible
Remuneration	up to E13, see Entgelttabelle TV-L
Annual leave / compensatory time off	30 days (24.12. + 31.12. off in addition) 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
Benefits	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, offices and and community rooms

## 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 Sciences 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 **02.06.2024**:

E-Mail: jobs@lrz.de

Subject: EXA4MIND (2024/26)

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.

