



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

The newly formed initiative at LRZ for quantum technologies is a group of specialists dedicated to providing, researching, and advancing quantum computing technologies for the Bavarian and international quantum communities. The QC team provides scientific users with a broad portfolio of resources and services, including quantum simulators, remote access to quantum hardware, scientific consultancy, and education/training. More experimentally, this team explores and develops integration pathways for quantum acceleration capabilities in next-generation high-performance computing (HPC) systems. As a member of this team, you will drive and facilitate conceptualizing and providing new tools and methods; working with new innovative hardware technologies; developing the Munich Quantum Software Stack for multiple quantum technologies including programming models, OS, compilers and abstraction layers; and building unique solutions to aid quantum computing end-users in the advancement of their research. Your work will be instrumental in shaping Bavaria's reputation as a global quantum hotspot and in pushing the boundaries of innovative scientific discoveries achievable with quantum computing.

We are looking to fill multiple positions for:

# High-Performance Computing (HPC) Software Engineer (f/m/d) for Quantum Software Stack

Your specific responsibilities on the team will be determined by your skill set and interests. In general, we ask that you:

- Be an active member of the team developing the Munich Quantum Software Stack
- Develop the needed technologies for making quantum computing practical and accessible, including programming environments, tools, scheduling and virtualization/multi-user tenancy
- Interface with the quantum computing community in the Munich Quantum Valley (MQV) to understand requirements
- Follow software development best practices, including continuous integration and testing
- Be a great team member, able to work well with others and across institutional boundaries
- Actively publish on new developments and technical achievements.

## **Basic Qualifications**

- PhD or MS in Computer Science, or related experience
- Knowledge of HPC environments and system software
- Experience in developing system software (OS, compilers, runtimes, programming models, etc)
- Proficient oral presentation and writing skills in English
- Strong desire to contribute your education, experience, energy and enthusiasm to build a dynamic and progressive quantum computing team and share in its success.

### **Preferred Qualifications**

- Experience in developing open-source software
- Experience in working on dynamic, fast-paced teams
- Experience in quantum computing software and tools

- Experience with quantum computing simulators on HPC systems
- Proficiency with the German language, or intent to gain proficiency

Area	Quantum Computing
Working time	Fulltime (40,1 Std) Flexible working model with electronic time recording
Term of the contract	Initially limited until 31.12.2024 with extension pending
Remuneration	E13, 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
Benefits	e.g. home office option, public transport discount (job ticket), 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?

- Ample room for contributing and implementing your own ideas
- A smart, highly educated and motivated team to lead and an opportunity to facilitate their development and success
- An organization that greatly values your contribution to our common success
- Ability to pursue a PhD if not already acquired
- Strong connection with academia and opportunities to mentor/teach if interested

Are you looking for a varied and challenging job in a dynamic, cooperative and innovative working environment? Then the LRZ is the right place for you!

Exciting tasks in the service of research, a collegial, appreciative working environment, an international, stimulating, diverse corporate climate; flexible working for an optimal work-life balance and a lot of creative freedom: That is the standard at our company.

In addition, we offer all the benefits of public service in our data center, which is equipped with the latest components. We also offer all the benefits of public service.

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 Computing Center of the Bavarian Academy of Sciences.

When it comes to the digitization 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 **14.03.2022**:

E-Mail: jobs@lrz.de

Subject: QC-SE (2022/12)

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.