

# VR

# **OPPORTUNITIES FOR STUDENTS**



# LRZ – Big machines, big science, big opportunities

Want to pursue your career in supercomputing, cloud computing, networking, machine learning, artificial intelligence or virtual reality? Want to be part of an ambitious international team contributing to ground-breaking science on a daily basis? Want to join one of the largest, leading scientific compute centres in the world? Then keep reading!

At the Leibniz Supercomputing Centre (Leibniz-Rechenzentrum, LRZ) we've been a pioneer of IT technology supporting academia and driving science for over 50 years. We develop and offer a full range of IT services, in-depth consulting and support. We also proudly stand at the forefront of worldclass high-performance computing with award-winning, energy-efficient research and facilities operation.

Imagine developing a new security protocol on a network with over 100,000 endpoints. Or creating a new method to schedule more jobs faster and more efficiently on a 26.7 petaflop supercomputer. Or crafting a new platform environment on experimental, emerging architectures. Like many before you at LRZ, your thesis today may be a new capability helping thousands of researchers and advancing science tomorrow.





# LRZ – Strong academic support

Our four directors of LRZ are all full professors at either of the two German universities of excellence based in Munich – Ludwig-Maximilians-Universität (LMU) and Technical University of Munich (TUM). That means LRZ's continuous evolution of technologies and services are closely coupled to cutting-edge scientific needs, both current and future.

## Ba. / Ma. thesis

Our LRZ teammates – especially those in our research department – frequently supervise Bachelor and Master theses. Some recently completed projects stem from the areas of:

- IT security and management
- High-performance computing
- Network technology

# PhD

With a full-time position at LRZ, you can also be enrolled at either LMU or TUM for a PhD programme. Recently completed PhD theses at LRZ include research in:

- Energy efficiency & performance monitoring
- Urgent computing
- Research data management
- Virtual Reality
- IT security and management

Interested in working on a project at LRZ for your bachelor's, master's or PhD? Get in touch via **phd@lrz.de** to learn more about opportunities and next steps.



# LRZ – Employment Opportunities

From supercomputing system administrators and researchers on energy efficiency to interconnect specialists, cloud operators and HPC user support, our job profiles at LRZ represent a broad range of expertise and every level of experience: Join us at any stage in your career and grow with us!

## **Bountiful benefits**

We offer an energetic and intellectually stimulating environment combined with:

- Flexible working hours
- Equal opportunities regardless of gender, social and cultural background

- Multi-cultural and international workforce
- Family-friendly atmosphere

Need more reasons to come to Munich? Spend your evenings with friends in our beautiful beer gardens or in the lively social scene of the city. Hike and ski your weekends away in the Alps, spend the day grilling and relaxing on the gentle banks of the Isar river or visit any number of museums, castles, theaters and parks. For good reason, Munich is regularly ranked among the top cities worldwide for highest quality of living - just recently reaffirmed in a Mercer study from March 2018.

### Check our available positions -

both full-time employment and student jobs **www.lrz.de/jobs** Don't see anything that fits you right now? We welcome your ideas! Prospective applications can be sent to **jobs@lrz.de** 



# LRZ – Education & Training

As one of the main PRACE training centres and a Gauss Centre for Supercomputing training facility, we offer a comprehensive programme for trainings and workshops. For many of the courses in our curriculum, you don't even need to study at a Munich university. These are open to anyone with an academic background.

Our core training topics include:

- Programming languages (e.g. C / C++ for beginners)
- HPC code optimisation
- Statistics programmes (e.g. R)
- Machine learning and artificial intelligence

For an overview on our current course programme, check out www.lrz.de/courses

### Special programmes

In the field of HPC we offer special programmes; our most popular is our 'Summer of Simulation'. This programme is directed at Master and PhD students just getting started in the field of simulation and supercomputing. The goal is to develop a scalable and optimal setup for your applications from the fields of molecular dynamics, quantum chemistry or bioinformatics and run them on our Tier-0 machine (SuperMUC / SuperMUC-NG) during the summer months. Space is limited to eight participants who will benefit from working with a personal tutor and can acquire a budget of up to 10 Mio CPU hours on one of the most powerful supercomputers worldwide.

### www.lrz.de/summerofsimulation



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