



Leibniz Supercomputing Centre

of the Bavarian Academy of Sciences and Humanities



The Leibniz Computing Centre of the Bavarian Academy of Sciences and Humanities has been the competent IT partner of Munich's universities and colleges as well as scientific institutions in Bavaria, Germany and Europe for almost 60 years. It offers the complete range of IT services and technologies as well as consulting and support - from e-mail, web servers, internet access and virtual machines to cloud solutions and the Munich Science Network (MWN). With the SuperMUC-NG supercomputer, the LRZ is one of the leading international supercomputing centres and focuses on emerging technologies, artificial intelligence and machine learning as well as quantum computing in the area of future computing. Last but not least, the AI agency based at the LRZ is significantly driving the implementation of Bavaria's AI strategy.

To strengthen our Computational X Support (CXS) group at LRZ, we are looking for a

Programming Expert (m/f/d) in High Performance and Parallel Computing for GPU-Accelerated HPC Applications

in a full-time position as soon as possible.

Your Key Tasks:

- Support the porting of user codes to different GPU accelerators from different vendors.
 - Benchmark key HPC-codes (user/community) with GPU acceleration on different LRZ systems
 - Automate benchmarking and application testing
 - Support benchmark development for future HPC procurements
 - Support/mentor large-scale compute projects on the upcoming SuperMUC-NG Phase 2
 - Conduct/organize tutorials and workshops for code developers
- Expert support for user tickets

Your Core Qualifications:

- PhD or university (post) graduate degree, diploma, master's degree or equivalent in a scientifically oriented subject (computational science, physics, mathematics, chemistry, life sciences etc.).
- Good experience in GPU (accelerator) programming and optimization with either CUDA, HIP or DPC++ and either OpenMP, OpenACC, or OpenCL
- Programming skills in a core HPC programming language (C, C++, Fortran) and at least one scripting language (Python, R, Julia, etc.).
- Experience in Parallel Programming with MPI and GPUs.
- Knowledge of Gitlab/Github, CI/CD methods, and/or Jenkins
- Knowledge of HPC environments and system software, e.g. `spack` package manager.

- Good oral presentation and writing skills in German or English.

We offer you a varied and challenging job in one of the largest and most innovative scientific computing centres in Europe with flexible working hours, a family-friendly atmosphere, a very good working atmosphere and a great deal of creative freedom. You will work independently in a dynamic, cooperative and innovative working environment.

Salary and benefits are compensated according to the collective employment agreement of the German Federal States (Tarifvertrag der Länder, TV-L) in salary group E13. As an institute of the Bavarian Academy of Sciences and Humanities, we actively promote gender equality. Within the framework of the regulations of SGB IX, applications from disabled persons will be given priority if they are equally qualified. We welcome applicants regardless of their cultural or social background.

This full-time position is initially limited to 2 years and is to be filled immediately. A further employment after the end of the fixed term is intended.

You can count on us! And we can count on you?

Then please send us your application documents (please by e-mail as an attached PDF document) by **30.11.2021** to:

E-Mail: bewerbungen@lrz.de
Betreff: Accelerator **(2021/58)**

Information on the collection of personal data in the application process is available at www.lrz.de/wir/stellen



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