Lehrstuhl für Rechnerarchitektur und Parallele Systeme
Technische Universität München – I 10 Prof. Dr. Martin Schulz

The Chair for Computer Architecture and Parallel Systems (CAPS) at the Faculty of Informatics, Technical University of Munich intends to fill one position at the earliest as

Scientific Researcher for HPC Resource Management and Scheduling (m/f/d) – 100%, TV-L E13, with the option for a PhD

The Chair for Computer Architecture and Parallel Systems (CAPS) offers a scientific researcher position (100% TV-L E13) in the area system software research for High Performance Computing on the path the Exascale. The work will focus on the development of new resource management and job scheduling techniques that map parallel applications to target systems in a most energy efficient manner. Work will include design, implementation and evaluation of novel techniques for capturing and fulfilling dynamically changing application and system requirements, the participation in standardization techniques to ensure a long-term viability of the research as well as active dissemination via publications and conference participation.

CAPS is part of TUM's department of Informatics, one of the leading CS departments in Europe. We focus on a wide range of aspects of computer architecture – from edge and IoT devices to HPC and cloud systems, from AI accelerators to quantum computing systems – as well as the needed system software needed to extract a maximum of efficiency form the respective architectures. The latter includes work on programming models, operating systems, scheduling, tools, I/O as well as application optimization.

Required Qualifications:

- Above-average MS degree with emphasis in informatics or a related field.
- Knowledge in parallel and/or distributed systems and their programming approaches.
- Basic understanding of HPC Systems and their modes of operation.
- Pleasure in taking responsibility, independent and structured way of working, high commitment, communication and team skills as well as very good English skills.

Preferred Qualifications:

- Experience with resource management systems.
- Good software engineering skills.
- Practical experience in teaching (e.g., as a tutor) or in industry.

Our Offer

We offer an interesting, well-equipped workplace at a renowned university and a pleasant working atmosphere in a nice and very international team. There is also a high degree of flexibility and self-responsibility and the opportunity to present scientific papers at international conferences. Work will be conducted in the context of a large EU project and in direct connection with the Leibniz Supercomputing Centre in Garching.

Application

Please send your complete applications (curriculum vitae, copies of certificates, letter of recommendation if available) until 24.01.2022 by e-mail in the form of a single PDF file, to Prof. Dr. Schulz (schulzm@in.tum.de). Applications received after the application deadline may be considered for future application rounds until the position has been filled.

TUM aims to increase the proportion of women and minorities in teaching and research. Qualified women and members of minority groups are therefore explicitly encouraged to apply. Disabled applicants will be given preference if their suitability and qualifications are otherwise essentially equal.

Data protection notice

When applying for a position at the Technical University of Munich (TUM), you submit personal data. Please refer to our data protection information in accordance with Art. 13 of the General Data Protection Regulation (DSGVO) http://go.tum.de/554159 regarding the collection and processing of personal data as part of your application. By submitting your application, you confirm that you have taken note of the TUM data protection information.