Vacancy Note

The High Performance Computing Center Stuttgart (HLRS) is the first German supercomputing centre and represents a founding member of the Gauss Centre for Supercomputing. It operates one of the fastest supercomputing systems world-wide and offers services as well as support in the domain of High Performance Computing to users from academia, research, but also industry. HLRS is one of the world leading research institutions in the area of supercomputing, data analytics as well as cloud computing and participates in the cluster of excellence on simulation technologies. Accordingly, HLRS targets innovative research and solution-centric technology development through award-winning national and international projects.

For research on cutting-edge solutions in the field of scalable applications for high-performance data analytics (HPDA) and artificial intelligence (AI)—specifically covering topics on machine learning and deep learning—we currently have a vacant position as

**Deep Learning/Machine Learning Expert m/f/d**

*(Researcher TV-L 13)*

HLRS_16_2020

in the German research project CATALYST. The position also includes the possibility to pursue a doctoral degree (PhD), an opportunity explicitly supported by HLRS.

**Your responsibilities**

The applicant will become a member of the department “Service Management and Business Processes” (SANE), working as part of an international team focusing on the convergence of high-performance computing (HPC) and AI. You will therefore be responsible to apply state-of-the-art solutions for a diverse set of application domains such as text analytics or image processing. Besides providing consultancy and support to our large-scale academic and industrial customers, you will be responsible for developing AI solutions in collaboration with small and medium-sized enterprises. In particular, state-of-the-art frameworks including Apache Spark and TensorFlow will be used, enriched, and tuned in order to fulfil the customers' real-world requirements.

The department combines research with agile management methods, meaning that teaching and student supervision are not parts of daily business.

**Minimum Qualifications**

- A university degree, ideally in the area of computer sciences, data management, engineering, physics, applied mathematics, or from a related field
- Strong focus on pro-activity, the ability to work in a team, and creativity
- Good programming skills in at least one high-level programming language such as Python or Java
- Strong interest in DA/ML/DL and a good understanding of its challenges
- Good command in Linux-based environments
- Good language skills in English or German
Ideal candidates additionally offer
- Conceptual thinking and a solution-oriented way of working
- Good knowledge in using programming, design, and workflow tools
- Practical experience in applying DA/ML/DL techniques
- Experience with Apache Spark, TensorFlow (Keras), PyTorch, Dask, Horovod, or other data analytics related tools
- Basic knowledge in the supercomputing domain (simulations, parallel applications, data analytics, or batch job management)

HLRS provides
- A pleasant working atmosphere in a highly-motivated team
- Training and courses to develop and improve personal skills
- A wide range of sports activities offered by the University of Stuttgart
- The social benefits of the public services

The contracts are restricted for the duration of the project according to the German law (WissZeitVG), although HLRS typically advocates for a contract extension. The salary is determined by the regulations for public servants, specifically TV-L.

If you have any questions regarding the research activities, please send an e-Mail to contact_sane@hlrs.de.

Your application:
You can apply to the position with a comprehensive application to the following addresses until 04.10.2020.
Höchstleistungsrechenzentrum Stuttgart, c/o Agnes Lampke, Nobelstraße 19, 70569 Stuttgart or with an E- mail with the number of the position HLRS_16_2020 desired in the subject line and only one PDF file as attachment to: bewerbungen@hlrs.de

An electronic application is preferred.

In an effort to strengthen the presence of female workers in the scientific areas, the University of Stuttgart invites women to apply for these job opening. Fulltime positions may be turned into part-time positions. Disabled people will have priority as long as equally qualified. The recruitment process will be made through the central administration department (Rektoramt).

Information on the handling of applicant data in accordance with Art. 13 DS-GVO can be found at: www.uni-stuttgart.de/datenschutz/bewerbung/.