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 the development of cutting-edge solutions in the domain of cloud computing and HPC infrastructures, we offer a vacant position as

Software Engineer
HLRS_12_2020
(Researcher TV-L 13)

within the European research project SODALITE (https://www.sodalite.eu/). SODALITE addresses software-defined, application-specific infrastructures (e.g. Cloud and HPC) to provide application developers and infrastructure operators with tools that (i) abstract their application and infrastructure requirements; (ii) enable simpler and faster development, deployment, operation, and execution of heterogeneous applications; (ii) focus on performance, quality, manageability, and reliability of the applications and infrastructures (e.g. via monitoring and dynamic workflow optimizations).

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 interface between application developer and infrastructure provider. Specifically, the technical work comprises batch-systems and cloud scheduler, in heterogeneous and combined environments such as Clouds and HPC. This also includes establishing means for data transfer and management, as well as application monitoring. Furthermore, you will apply your project management expertise to steer the work and monitor its progress towards the defined goals. In this context, you will represent HLRS at internal and external meetings with, for instance, the European Commission, and write scientific and technical reports.

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

Candidates need to provide
- A university degree, ideally in the area of computer sciences or a related field
- Strong focus on self-responsibility, pro-activity, the ability to work in a team, and creativity
- Experience with project management (e.g. leading a small team)
- Good programming skills in at least one high-level programming language such as Java, Python, or C++
- Basic understanding with virtualization and containerization technologies (e.g. Singularity) and orchestrators (e.g. OpenStack, Kubernetes)
- Good experience in Linux-based environments
- Good language skills in English

**Ideal candidates additionally offer**
- Conceptual thinking and a solution-oriented way of working
- Experience with continuous integration (Jenkins), source code management (git, gerrit), SSH, batch systems (Torque), and server administration in general
- Experience in workflow management, and application monitoring or profiling
- Experience in defining software interfaces and their implementation

**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
- Salary and the working conditions based on a collective labor agreement (TV-L)

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 31.08.2020.
Höchstleistungsrechenzentrum Stuttgart, c/o Agnes Lampke, Nobelstraße 19, 70569 Stuttgart or with an E-mail with the number of the position HLRS_12_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. Full-time 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/.