

## Job Advertisement

The High-Performance Computing Center Stuttgart (HLRS) established in 1996 is the first national supercomputing center in Germany. It operates one of the fastest and most modern supercomputers in the world and provides access to supercomputers for universities and research institutions as well as for industrial partners. HLRS holds a worldwide leading position in the research areas of parallel computing, cloud computing and high-performance data analysis. HLRS is also significantly involved in international and national research projects.

Through our department "**Training and Scalable Algorithms**" (TASC), HLRS offers a comprehensive range of **training courses** in the field of HPC, AI, and related technologies. The courses are targeted at scientists and experts from the university environment, from research institutions, as well as from industry and small and medium-sized enterprises. TASC further develops HLRS's courses by integrating new topics such as **artificial intelligence, hardware accelerators, and quantum computing**.

In the department TASC, we are currently looking for a

### Research scientist with focus on HPC, AI, and training (f/m/x) (100%, TV-L 13) HLRS\_24\_2025

You will support our team in shaping the HLRS's training concept and contributing to the EU project **GreenShift – EU MSc in AI & HPC for Green Digital Innovation in Transport**. The European transport sector faces an urgent need for **green transformation** to meet sustainability and emission reduction targets. GreenShift will equip R&D and product design professionals with practical skills to harness the power of **AI and HPC** to fast-track the development of innovative new products and solutions for the transport industry. GreenShift will drive transformative innovation in the European Transport Sector.

#### Your main tasks in the project GreenShift:

- Design the curriculum for and deliver the **online EU MSc in AI & HPC for Green Digital Innovation in Transport**.
- Complement the MSc programme with e.g., workshops or innovation and research challenges on specific technology areas.
- Design and rollout the GreenShift European Mobility programme, facilitate students' onboarding and set up a students' and faculty support programme.
- Within the GreenShift programme, strengthen the portfolio of HLRS's compact and flexible courses, reinforcing their work-based learning components.

#### Your tasks as a member of TASC at HLRS:

- Autonomous **research in the areas of HPC and AI**: Big data analytics, artificial intelligence, emerging computer architectures and domain-specific technologies.
- Developing **new courses and modules** that represent the current state of research.
- **Teaching and support** of participants in our courses.
- Creation, supervision and assessment of examinations and exercises.
- Strengthening the visibility of our course programme (especially for **industry**).

#### Your qualifications:

- You have successfully completed a **university degree (MSc or PhD or equivalent)** in the areas of engineering, natural sciences, mathematics, computer science, or a comparable qualification with a technical focus.

- You have very good **programming skills** in **at least one** established high-level language (e.g., Python, C/C++, Fortran).
- You have relevant experience in designing and conducting **workshops or tutorials**.
- You have very good **communication skills** also towards large audiences and external partners. You enjoy interacting with people.
- You have some experience in project management or in working in a (research) **project**.
- You are able to work in a **team**; and at the same time, you can work **independently** and pragmatically.
- You are proficient in **English**, written and spoken, and have at least a good command of **German**, written and spoken.

**Ideally, your profile is supplemented by:**

- Experience in applying AI and HPC skills in the field of **transport** (e.g., fleet optimisation, energy-efficient logistics, smart city planning).
- Experience with **Linux-based systems**.
- Experience with **parallel programming** paradigms.
- Experience with **AI workloads, frameworks, and libraries** (e.g., TensorFlow, PyTorch, or JAX).
- Experience with batch and workload management systems, parallel file systems (e.g., Lustre), heterogeneous HPC clusters with GPUs, or FPGAs.
- Experience working with start-ups or SMEs.
- Experience in writing project proposals.

**As a member of our team, you can expect:**

- Working in an EU project with 14 international partners.
- A professional working environment in a highly motivated and collaborative international team.
- Flexible working hours and 30 days paid leave per year.
- The possibility of remote work (German: „ortsunabhängiges Arbeiten“) generally up to 60%. Workplace is the HLRS at the University of Stuttgart.
- Use of the wide range of training opportunities at HLRS, of personnel development (e.g., communication and teaching skills, languages, leadership) and of the sports facilities of the University of Stuttgart.
- The social benefits of the public service and an allowance for local public transport.

The position is temporary **starting on October 1<sup>st</sup>, 2025** or on an earlier/later date upon agreement. Employment in this position has to comply with the legal regulations and is limited to the duration of the GreenShift project, which is scheduled to start in **October 2025** and run for **four years, until September 30<sup>th</sup> 2029**. Salary for this position is based on TV-L 13.

HLRS is committed to supporting and retaining talented people even at the conclusion of projects, when possible: Before the project ends, HLRS will examine what possibilities might exist for a contract extension, based on funding that will be available at that time and in accordance with legal regulations.

**Are you interested?**

Then we are looking forward to receiving your application!

Your application should **include** a cover letter, your CV, your university degrees and relevant employers' references.

Please **send your application** by e-mail (**as one PDF file**) with the subject "**HLRS\_24\_2025**" to: [bewerbungen@hlrs.de](mailto:bewerbungen@hlrs.de) by **September 15th, 2025**.

For **questions regarding the content of the job posting**, please contact Dr.-Ing. Lorenzo Zanon via [courses@hlrs.de](mailto:courses@hlrs.de) .

In an effort to strengthen the presence of female workers in the scientific areas, the University of Stuttgart invites women to apply for this job opening. Full-time positions may in general be turned into part-time positions. Disabled people will have priority as long as they are equally qualified. The recruitment process will be handled by the central administration of the University of Stuttgart. Information on the handling of applicant data in accordance with Art. 13 DS-GVO can be found at: <https://www.uni-stuttgart.de/en/privacy-notice/job-application/> .