As a member of the Helmholtz Association, Forschungszentrum Jülich makes an effective contribution to solving major challenges facing society in the fields of information, energy, and bioeconomy. It focuses on varied tasks in the area of research management and utilizes large, often unique, scientific infrastructure. Come and work with around 6,400 colleagues across a range of topics and disciplines at one of Europe’s largest research centres.

We look forward to receiving your application until 31.05.2020 via our Online-Recruitment-System!

Questions about the vacancy?
Contact us by mentioning the reference number 2020-110: career@fz-juelich.de
Please note that for technical reasons we cannot accept applications via email.
www.fz-juelich.de

Germany’s largest research organization, the Helmholtz Association, establishes Helmholtz AI - a dedicated, interdisciplinary platform that will research, develop, combine, and promote artificial intelligence (AI) and machine / deep learning (ML/DL) methods nationwide for all Helmholtz centers, in collaboration with its external and university partners. With Helmholtz AI, the Helmholtz Association now has the unique opportunity to leverage its broad long-standing scientific expertise and the large datasets from unique experiments across many fields with state-of-the-art learning algorithms to answer questions with strong impact on society.

Forschungszentrum Jülich is part of Helmholtz AI and implements several new groups that will become foundational building blocks of this new AI research platform together with groups located at other Helmholtz centers. The Jülich Supercomputing Centre (JSC) at Forschungszentrum Jülich is a research institute that operates one of the most powerful supercomputer infrastructures for scientific and engineering applications in Europe. To advance large-scale ML/DL methods using High Performance Computing (HPC), JSC sets up a Helmholtz AI High Level Support Team (HLST) that will focus on software engineering and research support for ML/DL.

If you are an expert in ML/DL with a strong flair for software engineering, are made to lead a team and are enthusiastic about working with scientists of many domains, and with diverse and unique data and if you are burning for open sharing of knowledge and experience you are the right candidate.

We are looking to recruit the

**Head of Helmholtz AI High Level Support Team - Software Engineer and Researcher for Large-Scale HPC Machine and Deep Learning**

**Your Job:**

At JSC, HLST will work close together on setting up Helmholtz AI locally with the research-oriented Cross-Sectional Team Deep Learning (CST-DL) and other groups, pursuing common generic research directions for self-organized continual learning transferable across different tasks and domains. Special focus will be on making use of highly scalable and distributed ML/DL methods on HPC facilities hosted directly at JSC. The activity will be strongly dedicated to principles of open science and open source software, making all the results transparent and all the tools available to scientific communities and public.

You will
- Lead a cutting edge HLST as an integral part of Helmholtz AI
- Define and coordinate research, open source software development and research support activities for ML/DL and related methods with focus on large-scale HPC applications
- Work close together with other teams at JSC to define and push forward common long-term research goals and long-term open software libraries, platforms and data services with high usability and impact across domains and ML/DL community
- Establish tight connections with other Helmholtz AI Centers, their HLSTs and local partners to build up open research community
- Provide and coordinate support to the Helmholtz AI research community for their scientific projects that involve ML/DL technologies and tools, including symposia, workshop and hackathon organization
- Conduct your own research, acquire new research projects and funding, publish and present findings and research outcomes of your own research and of the projects supported by HLST

Your Profile:
- Excellent Master or Doctorate (preferred) degree in computer science, machine learning, mathematics, physics, or a related subject
- Ability and ideally experience to lead a small team of experts with heterogeneous skills, to organize and coordinate group tasks (e.g. support tickets, documentation, quality control, etc.)
- Research experience in ML/DL field, documented in your dissertation, peer-reviewed publications, project experience, participation in top conferences (NeurIPS, ICLR, ICML, etc)
- Practical experience with ML/DL toolchains and workflows documented in your dissertation, peer-reviewed publications, or project experience
- Advanced experience with high level programming languages (C++, Python) and best software engineering practices
- Experience with High Performance Computing (ideally ML/DL related, CPU and GPU-based)
- Very good knowledge of English in written or spoken form
- Ability to present your work at international conferences

Our Offer:
- Work on frontiers of scientific and technological challenges as team leader with access to cutting-edge and unique supercomputing systems
- Become a foundational and fundamental member of one of the biggest AI initiatives in Germany
- Develop your academic career and engage in the supervision of master and doctoral students in the highly diverse fields.
- Freedom to work on your own research questions for a substantial fraction of your working time
- Outstanding research and computing infrastructures in one of Europe’s largest
supercomputing facilities

- Limited for 2 years with clear possible longer-term prospects (Long-term funding already set and confirmed)
- International and interdisciplinary working atmosphere
- A comprehensive further training programme
- Flexible working hours and various opportunities to reconcile work and private life
- Full-time position with the option of slightly reduced working hours
- Salary and social benefits in conformity with the provisions of the Collective Agreement for the Civil Service (TVöD)

Forschungszentrum Jülich promotes equal opportunities and diversity in its employment relations.

We also welcome applications from disabled persons.