The Faculty of Computer Science invites applications for the Chair (W2/W3) of Data Science

is to be filled as soon as possible as a strategic chair in the Center for Scalable Data Analytics and Artificial Intelligence (ScaDS.AI Dresden/Leipzig). The position offers an excellent environment within the ScaDS.AI competence center Dresden/Leipzig, which is funded by the Federal Ministry of Education and Research and the Free State of Saxony. This includes the opportunity for interdisciplinary cooperation with computer scientists, natural scientists, mathematicians and scientists from the life sciences, medicine, environmental sciences, earth sciences, and engineering. There is access to state-of-the-art technologies and an outstanding high-performance computing infrastructure. Further information about the research directions of ScaDS.AI can be found at https://www.scads.ai.

The new chair will support the field of artificial intelligence (AI) and machine learning (ML) at the university and play a central role in the ScaDS.AI center Dresden/Leipzig. In order to close the gap between the efficient use of Big Data, advanced AI methods, and knowledge representation, a total of eight new chairs in the fields of Data Analytics and Artificial Intelligence will be established at both locations of ScaDS.AI. This will strengthen the methodological focus in Big Data, Machine Learning, and Artificial Intelligence. At TU Dresden, fundamental research areas are to be established by four new chairs in "Data Science", "Knowledge-Aware Artificial Intelligence", "Scalable Software Architectures for Data Analytics" and "Machine Learning for Spatial Understanding". In particular, this will also advance the use of AI methods in various application areas.

The Chair of Data Science will explore innovative approaches by combining data science with machine learning and artificial intelligence by new algorithms. Emphasis is on new methodological advancements that are inspired by concrete applications and have a practical impact. For example, own contributions to one or more of the following topics are expected: algorithms for data-driven modeling or simulation of complex systems; methods for model inference from data or model learning; methods for model-free forecasting from data; algorithms for high-dimensional data spaces; optimization or design centering algorithms for machine learning; methods for dimensionality reduction or data embedding; data interpretation methods or visual data analytics; uncertainty quantification methods; co-design of data analysis and machine learning methods; data engineering and active learning. We expect that the practical relevance of the developed methods has been successfully demonstrated in at least one of the ScaDS.AI application areas: materials science and engineering, visual computing, environmental and transportation science, digital humanities, business data intelligence, life sciences and medicine.

You (m/f/x) will represent the topic of the call in research and teaching. The chair is expected to play a central role in ScaDS.AI Dresden/Leipzig and to integrate into the Faculty of Computer Science. Within the framework of the competence center, there are close cooperations with various disciplines. Teaching obligations are reduced to two 2 hours/week for the duration of the ScaDS.AI Dresden/Leipzig, but participation in teaching is desired. This includes courses in German or English in the area of dedication for the curricula of the Faculty of Computer Science. In addition, as it is standard, you will teach basic courses in the field of dedication and at other faculties.
In particular, we expect that the chair contributes to developing the new “Data Science” curriculum and the new track “Applied AI” in the Master’s Program “Computational Modeling and Simulation”. The responsibilities also include participation in academic self-administration and in the academic committees of the Faculty of Computer Science and Technische Universität Dresden.

You are internationally renowned in the mentioned research fields and have experience in one or several application areas relevant to ScaDS.AI Dresden/Leipzig. Special emphasis is placed on excellent international publications as well as on active participation in collaborative interdisciplinary research, and the independent acquisition and management of research funding. The applicant is expected to have substantial experience in the supervision of PhD students, proven excellent teaching abilities, and a habilitation or habilitation-equivalent achievements. Applicants must fulfil the employment qualification requirements of § 58 of the Act on the Autonomy of Institutions of Higher Education in the Free State of Saxony (SächsHSFG).

The chair is usually appointed as a W2 position. An upgrade to a W3 position may be considered if the excellence criteria of ScaDS.AI are met in an exceptional way: outstanding research results, proven success in mentoring junior scientists, high international visibility, coverage of a broader research area, and innovative as well as preferably interdisciplinary research approaches.

For questions, please contact the Dean of the Faculty of Computer Science, Prof. Dr. sc. techn. Ivo F. Sbalzarini, Tel. +49 351 463-32815; E-Mail: dekan.inf@tu-dresden.de, or the Director of ScaDS.AI, Prof. Dr. rer. nat. Wolfgang E. Nagel, Tel. +49 351 463-35450; E-Mail: scads.ai@tu-dresden.de.

TU Dresden seeks to employ more female professors. Hence, we particularly encourage women to apply. Applications from candidates with disabilities or those requiring additional support are very welcome. The university is a certified family-friendly employer and has a Dual Career Service. If you have any questions about these or related topics, please contact the Equal Opportunity Officer of the Faculty of Computer Science (Dr.-Ing. Iris Braun, +49 351 463-38063) or the Representative of the Disabled (Mr. Roberto Lemmrich, Tel.: +49 351 463-33175).

Please submit your application including the usual documents (curriculum vitae in tabular form, description of your scientific career, list of publications, list of third-party funded projects and previous teaching activities including the results of teaching evaluations (preferably of the last three years)), a research (max. 3 pages), integration as well as teaching concept (max. 1 page each) as well as a certified copy of the certificate of your highest academic degree by August 22, 2022 (stamped arrival date of the university central mail service applies) to: TU Dresden, Dekan der Fakultät Informatik, Herrn Prof. Dr. Ivo Sbalzarini, Helmholtzstr. 10, 01069 Dresden, Germany, and in electronic form (CD, USB storage medium or via the SecureMail Portal of TU Dresden, https://securemail.tu-dresden.de to dekan.inf@tu-dresden.de).

Reference to data protection: Your data protection rights, the purpose for which your data will be processed, as well as further information about data protection is available to you on the website: https://tu-dresden.de/karriere/datenschutzhinweis.