As part of the German government’s artificial intelligence (AI) strategy, the successful Saxon competence center ScaDS.AI Dresden/Leipzig (Center for Scalable Data Analytics and Artificial Intelligence) is being expanded into a leading German AI competence center for Big Data and Artificial Intelligence (AI). TUD Dresden University of Technology embodies a university culture that is characterized by cosmopolitanism, mutual appreciation, thriving innovation and active participation. For TUD diversity is an essential feature and a quality criterion of an excellent university. Accordingly, we welcome all applicants who would like to commit themselves, their achievements and productivity to the success of the whole institution.

At the Center for Interdisciplinary Digital Sciences (CIDS), the Center for Scalable Data Analytics and Artificial Intelligence (ScaDS.AI Dresden) is seeking to employ a student as

**Student Assistant (m/f/x) (max. 19 hrs./week)**

starting as soon as possible for a period of 12 months (can be extended). The period of employment is governed by the Fixed Term Research Contracts Act (Wissenschaftszeitvertragsgesetz – WissZeitVG) as well as the Higher Education Act in the Free State of Saxony (Sächsisches Hochschulgesetz – SächsHSG) in conjunction with the TdL guidelines (collective bargaining association for the German federal states) for Student Assistants and Research Assistants dated February 28, 2024.

**Tasks:** academic support, esp.
- supporting the investigations into the training of genomics language models,
- assisting with the implementation of scalable efficient pipelines on the HPC cluster
- facilitate the researchers with the hyperparameter investigations and tuning, including comparison of model performance and GPU resource usage trade-off

We are looking for students to join us in the research on **Training of Genomics Language Models**. The growth in the use of language models on genomic sequence data has been exponential due to their ability to capture non-linear long-range interactions between sections of importance of this highly multi-dimensional data. In cancer research, they provide nucleotide and sequence-level insights into genomic events of importance, influencing classification, treatment and survival analyses.

**Requirements:**
- student enrolled at a college/university in Computer Science, Engineering, Bioinformatics or similar, or has relevant experience
- programming skills in Python, Shell, C++
- interest or experience in working with genomics data is beneficial

TUD strives to employ more women in academia and research. We therefore expressly encourage women to apply. The University is a certified family-friendly university and offers a Dual Career Service. We welcome applications from candidates with disabilities. If multiple candidates prove to be equally qualified, those with disabilities or with equivalent status pursuant to the German Social Code IX (SGB IX) will receive priority for employment.

Please submit your detailed application including the usual documents (Cover letter, CV, copies of your references and certificates), quoting the job number „ScaDS.AI SHK Jurenaite”, by August 8, 2024 (stamped arrival date of the university central mail service or the time stamp on the email server of TUD applies) to TU Dresden, ScaDS.AI, Frau Neringa Jurenaite, Helmholtzstr. 10, 01069 Dresden, Germany or via the TUD SecureMail Portal https://securemail.tu-dresden.de by sending it as a single pdf-document to neringa.jurenaite@tu-dresden.de. Please submit copies only, as your application will not be returned to you. Expenses incurred in attending interviews cannot be reimbursed.

**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.