Technische Universität Dresden (TUD), as a University of Excellence, is one of the leading and most dynamic research institutions in the country. Founded in 1828, today it is a globally oriented, regionally anchored top university as it focuses on the grand challenges of the 21st century. It develops innovative solutions for the world's most pressing issues. In research and academic programs, the university unites the natural and engineering sciences with the humanities, social sciences and medicine. This wide range of disciplines is a special feature, facilitating interdisciplinarity and transfer of science to society. As a modern employer, it offers attractive working conditions to all employees in teaching, research, technology and administration. The goal is to promote and develop their individual abilities while empowering everyone to reach their full potential. TUD embodies a university culture that is characterized by cosmopolitanism, mutual appreciation, thriving innovation and active participation. Accordingly, we welcome all applicants who would like to commit themselves, their achievements and productivity to the success of the whole institution.

The Center for Information Services and High-Performance Computing (ZIH) offers a position within the research project „Cycling Behavior in Germany (RiD) – a multi-criteria approach to quantify local differences in route choice and driving behavior“ as

**Research Associate in the field of Machine Learning/ Data Science (m/f/x)**
(subject to personal qualification employees are remunerated according to salary group E 13 TV-L)

starting at the **next possible date** and limited for a period of 36 months. The period of employment is governed by the Fixed Term Research Contracts Act (Wissenschaftszeitvertragsgesetz-WissZeitVG). The position comprises 75 % of the fulltime weekly hours. The position offers the chance to obtain further academic qualification (e.g. PhD).

Working at ZIH offers you highly interesting and creative tasks to current scientific topics, a modern data center infrastructure, flexible working hours, a family-friendly working environment, and living in a city of science and culture surrounded by a unique landscape.

The RiD project explores the influence of space- and city-specific variables on the travel behavior and route choice of cyclists in Germany, with the focus of the advertised position being on methodological aspects. You will investigate how well classical statistical methods can explain route choice, how suitable machine learning (ML) methods are for this purpose, and how their results can be interpreted. The project work offers a perfect combination of the development of modern methods and their application. The project is professionally supervised in cooperation with the "Friedrich List" Faculty of Transport and Traffic Sciences.

**Tasks:**
- research and development work on the adaptation and application of statistical methods,
- research and development work on the adaptation and application of ML methods,
- analysis and research work on interpretable AI and Data Science,
- development and application of theoretical approaches to compare the results of statistical and ML methods (including goodness, variable influence),
- documentation of the research and results, presentation at meetings, conferences as well as in scientific publications.

**Requirements:**
- university degree (Master) in computer science, mathematics/statistics or a comparable engineering or natural science,
- good knowledge in the field of statistics, machine learning methods or data science,
application-ready programming skills (e.g., Python, R),
- very good English skills, both written and spoken.

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 comprehensive application including the usual documents under the job ID “RiD” by January 20, 2023 (stamped arrival date of the university central mail service applies) preferably via the TU Dresden SecureMail Portal https://securemail.tu-dresden.de by sending it as a single PDF document to zih@tu-dresden.de or to: TU Dresden, ZIH, Dr. Iryna Okhrin, Helmholtzstr. 10, 01069 Dresden, Germany. 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.