Technische Universität Berlin

Research assistant - salary grade E13 TV-L Berliner Hochschulen

under the reserve that funds are granted

part-time emplyoment may be possible

DFG-funded Collaborative Research Center (CRC) “AgiMo: Data-driven agile planning for responsible mobility”, involving four universities and the German Aerospace Centre (DLR), will conduct research on 20 research topics with 25 PhD candidates within the next years. The following main research goals are pursued by this Center: (1) develop a new set of consistent scientific methods for mobility planning and management, (2) integrate a new set of modular metrics for responsible mobility, (3) embed the planning methods into the open data AgiMo Digital Twin, (4) develop participatory planning methods based on the technical outcomes from the digital twin to create future scenarios for responsible mobility that are technically well-grounded and at the same time represent stakeholder preferences.

The integrated Research Training Group (RTG) will provide doctoral researchers with an attractive qualification program, foster networking, enable internationalization and mobility, and create a collaborative environment.

Faculty V - Institute of Land and Sea Transport Systems / Department of Transport Systems
Reference number: V-316/25 (starting at the earliest possible / limited until 30/06/2029 / closing date for applications 18/08/25)

Your responsibility:

- Coordination of the above-mentioned research project
- Participation in research activities
- Work on subprojects C3 and C4 within the above-mentioned CRC. Subproject C3 focuses on the development of a digital twin for transportation planning. Subproject C4 involves the application of this digital twin to compute various future scenarios for the transportation system, with a particular focus on decarbonization
- Further development of the MATSim traffic simulation software
- Collaboration with national and international partners

Pursuing a doctoral degree in connection with the advertised position is possible and expressly encouraged.

Your profile:

- Successfully completed academic university studies (Master, Diplom or equivalent) in Transportation Engineering or a related field
- Extensive experience with the simulation software MATSim, particularly in building large-scale MATSim scenarios and implementing new features in MATSim
- Solid experience in large-scale programming projects and project management
- Excellent programming skills in Java
- Experience in processing georeferenced data (GIS)
- Familiarity with version control systems (e.g., Git) and continuous integration
- Strong knowledge in analyzing traffic data (e.g., traffic counts) and integrating such data into transport models
- Strong organizational skills, communication abilities, and assertiveness desirable
- Clearly structured and process-oriented working style preferred
- Knowledge in the field of transport planning
- Proficiency in data analysis tools (e.g., R or Python)
- Very good command of German, both written and spoken
- Good command of English, both written and spoken
- Strong analytical skills and ability to work in a team desirable
- Genuine interest in the subject
- Multidisciplinary orientation
- Experience in the automated creation of MATSim models for different regions preferred
- Experience with the simulation software Visum preferred

How to apply:

Please send your application, quoting the **reference number**, along with the usual documents (CV, school leaving certificates, university degree certificates, and, if applicable, employment references) to Technische Universität Berlin, exclusively via email to bewerbung@vsp.tu-berlin.de as a single PDF file.

By submitting your application via email you consent to having your data electronically processed and saved. Please note that we do not provide a guarantee for the protection of your personal data when submitted as unprotected file. Please find our data protection notice acc. DSGVO (General Data Protection Regulation) at the TU staff department homepage: https://www.abt2-t.tu-berlin.de/menue/themen_a_z/datenschutzerklaerung.

Due to the additional cost, application documents cannot and will not be returned. Please

submit copies only!

To ensure equal opportunities between women and men, applications by women with the required qualifications are explicitly desired. Qualified individuals with disabilities will be favored. The TU Berlin values the diversity of its members and is committed to the goals of equal opportunities. Applications from people of all nationalities and with a migration background are very welcome.

The vacancy is also available on the internet at:
https://www.jobs.tu-berlin.de