Dresden University of Technology

TUD Dresden University of Technology, 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. 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 **"Friedrich List" Faculty of Transport and Traffic Sciences, Institute of Traffic Telematics,** the **Chair of Traffic Process Automation** offers a full-time position as

Research Associate / Postdoc (m/f/x)

(subject to personal qualification employees are remunerated according to salary group E 13 TV-L)

starting **as soon as possible.** The position is limited to December 31, 2027. The period of employment is governed by the Fixed Term Research Contracts Act (Wissenschaftszeitvertragsgesetz – WissZeitVG).

The chair develops models, algorithms, and solutions to manage and control multimodal transport systems, including but not limited to: traffic state estimation, prediction, and control in the context of cooperative systems (C-ITS), energy-efficient driving, and safe interactions between vehicles and vulnerable road users. Our employees have a common goal of contributing to a sustainable, safe, and efficient transport system via conducting interdisciplinary research and delivering high-quality education.

Tasks: The candidate is expected to take a major role in research. The main tasks include, but are not limited to:

- scientific research activities, including participating in research projects on topics of traffic system dynamics modelling, prediction and control, and in general Intelligent Transportation Systems; writing scientific publications; presenting research results at conferences; research in connection with academic qualification at the habilitation level
- supporting the design of a new ITS MSc program
- project-related support in supervision of student thesis
- project-based supporting the administration of the chair, e.g., conception and application for research projects, and project management

Requirements: The successful candidate should:

- hold a university and, if applicable, a PhD degree in one of the following fields: transportation engineering, applied mathematics, systems and control, operational research, data science, robotics, electrical engineering, or equivalent
- have an affinity for guiding students
- be proficient in Python/Java/C++
- be proficient in written and spoken English
- be able to work in a team
- be proficient in German or be committed to master German
- have a track record in traffic flow modelling and control
- have experience in microscopic traffic simulation with VISSIM/SUMO/AIMSUN

We offer: Working in a team of enthusiastic scientists who work to push the boundaries of knowledge in the field in fundamental research and discuss their findings and potential applications with industry and policy-makers.

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. 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 applications containing all documents. The documents must be in English and contain:

- a letter of motivation for the application (cover letter);

— curriculum vitae including a list of publications;
— statements of teaching and research interests (max. 3 pages);
— an English summary of your dissertation (max. 2 pages);
— degree certificate;
— names and contact details of three references that we can contact.

Please submit your detailed application including the mentioned documentation by **January 28, 2026** (stamped arrival date of the university central mail service or the time stamp on the email server of TUD applies), preferably via the TUD SecureMail Portal https://securemail.tu-dresden.de by sending it as a single pdf file to **vpajob@tu-dresden.de** or to:

TU Dresden, Chair of Traffic Process Automation, Prof. Dr. Meng Wang, 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. Interviews will start as soon as suitable candidates are identified.

TUD is a founding partner in the DRESDEN-concept alliance.

DRESDEN concept