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. 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 position as

Research Associate / Postdoc (m/f/x)
(subject to personal qualification, the position is remunerated according to salary group E 13 TV-L)

starting as soon as possible for a duration of three years with the possibility of extension after a positive evaluation. The period of employment is governed by the Fixed Term Research Contracts Act (Wissenschaftszeitvertragsgesetz – WissZeitVG). The position aims at obtaining further academic qualification (e.g. habilitation thesis).

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, education, and administration. The main tasks include, but are not limited to:

- scientific research activities, including participating in research projects on topics of traffic system dynamics modelling and control, and in general Intelligent Transportation Systems; writing scientific publications; presenting research results at conferences; research in connection with own qualification;
- teaching activities (according to DAVOHS) under the professional responsibility of the holder of the professorship, including preparation of teaching materials; conducting courses and examinations; supervision and assessment of seminar papers and theses; professional assessment of seminar papers and theses;
- supporting the administration of the chair, e.g., preparation of meetings, conception and application for research projects, and project management.

**Requirements:**
The successful candidate should:
• hold a university and PhD degree in transportation engineering, applied mathematics, systems and control, operational research, data science, robotics, electrical engineering, or equivalent;
• be proficient in Python/Java/C++;
• be proficient in written and spoken English;
• be proficient in German or be committed to master German;
• be able to work in a team;
• have an affinity for teaching and guiding students.

Experience with project acquisition and project management is considered a plus.

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. As a starting package, you will co-supervise two PhD researchers with the chairholder.

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 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 PhD dissertation (max. 2 pages);
• PhD degree certificate;
• names and contact details of three references that we can contact.

Please submit your comprehensive application including the usual documentation by **February 15, 2023** (stamped arrival date of the university central mail service applies) to: **TU Dresden, Fakultät Verkehrswissenschaften “Friedrich List”, Institut für Verkehrstelematik, Professur für Verkehrsprozessautomatisierung, Prof. Dr. Meng Wang, Helmholtzstr. 10, 01069 Dresden** or via the SecureMail Portal of TU Dresden [https://securemail.tu-dresden.de](https://securemail.tu-dresden.de) as a single pdf document to meng.wang@tu-dresden.de. 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.

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](https://tu-dresden.de/karriere/datenschutzhinweis)