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 Faculty of Computer Science, Institute of Applied Computer Science, the Chair of Industrial Communications offers a position as

**Research Associate (m/f/x)**

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

The position is to be filled on the next possible date and is fixed-term until February 28, 2025 with the option of an extension. The period of employment is governed by Fixed Term Research Contracts Act (Wissenschaftszeitvertragsgesetz-WissZeitVG). The position offers the chance to obtain further academic qualification. Balancing family and career is an important issue. The position is basically suitable for candidates seeking part-time employment. Please indicate the request in your application.

Integrated in a highly dynamic field of research, the Chair of Industrial Communications offers chances to help shaping the future of communication systems in the context of Industrial Internet of Things (IIoT) and Industrie 4.0, to gain valuable experience in conducting research projects, and to build up or to extend a professional network with partners from research and industry.

**Tasks:** Analysis and development of concepts and architectures for an integration of Cyber Physical Systems and of Internet of Things components into industrial applications, specifically in automation and control systems; design of information models and their transition into software solutions; integration of information models into wireless and wired industrial communication systems and their associated software tools; technology screening of IoT and CPS. The research results shall be published at international conferences and in well-recognized journals.

**Requirements:** excellent university degree (M.Sc. or Diploma) in the field of Computer Science, Electrical Engineering or comparable; detailed knowledge in object-oriented software development and in model design using Unified Modeling Language (UML) or SysML, in description languages for automation components, and in information modeling in Automation, e.g. using OPC UA. Knowledge of Industrial Ethernet and network management are of benefit.

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 by December 15, 2022 (stamped arrival date of the university central mail service applies), preferably via the TU Dresden SecureMail Portal.
https://securemail.tu-dresden.de as a single PDF document to martin.wollschlaeger@tu-dresden.de or by mail to: TU Dresden, Fakultät Informatik, Institut für Angewandte Informatik, Professur für Prozesskommunikation, Herrn Prof. Martin Wollschlaeger, Helmholtzstr. 10, 01069 Dresden. 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