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.

The Faculty of Computer Science and the Barkhausen Institut gGmbH, in a joint application procedure, invite applications for the

**Chair (W3) of Trustworthy Computing**

combined with the position of a

**research group leader at the Barkhausen Institut gGmbH**

to be filled at the **next possible date**. The chair will be assigned to the Institute of Computer Engineering or the Institute of Systems Architecture, depending on your scientific focus.

The Barkhausen Institut gGmbH is a non-profit subsidiary of TU Dresden and works legally independent on the trustworthiness of the Internet of Things. The Barkhausen Institut was founded five years ago and has six research groups. Communicating research results to the public is a high priority at the institute.

You (m/f/x) will lead a research group of the Barkhausen Institut gGmbH and work on cross-group research topics there. The focus of your work shall be on application-oriented research in the area of design of safety and mission-critical systems, where safety is to be understood in the sense of both IT security ("security") and functional safety ("safety").

In addition to your work at the Barkhausen Institut gGmbH, your participation in collaborative research activities is explicitly desired. In your function you will shape the strategic and professional orientation of your team and ensure the quality of the research work. In this process you will actively contribute to cross-group and cross-disciplinary projects, implementing the strategy of the institute and the Faculty of Computer Science. You promote the work ability and further development of your group members and thus you contribute to a high motivation of your team. You enable your team to explain research clearly in exchange with society, to take up suggestions and to develop ideas together. Furthermore, we expect your willingness to solicit DFG projects and assume that you bring an interest in participating in collaborative research. In addition to existing competencies, a focus should be on developing participatory and collaborative research models. Moreover, we would like to see active cooperation with partner institutions in the Dresden-concept, the research alliance between TU Dresden and local non-university research institutions.
Teaching obligations are reduced, but participation in teaching is desired. This includes courses in German or English in the dedication area for the degree courses of the Faculty of Computer Science, in particular the English-language Master's program "Distributed Systems Engineering" or the planned English-language Master's program "Computer Engineering". Your responsibilities also include the participation in the further development and self-administration of the degree study programs. We expect applications with partners, e.g. from the mobile communications or healthcare industry. The willingness to actively participate in the academic self-administration is taken for granted.

Your research focuses should include at least two of the following areas:
- Hardware/software co-design for trustworthy computing;
- Design, test, simulation and verification of software and hardware systems, in particular consistency checking, automatic test generation and formalized contracts
- Security und Safety Engineering;
- Low-level system security,
- Certification methods.

We are looking for you as a personality with outstanding international reputation and visibility for applied research in the field of Trustworthy Computing. Your publications, your international networking and project experience serve as proof. Your research achievements have high application potential. In addition, we expect experience in independent university teaching, in acquisition of third party-funding and in supervision of PhD students. In particular, we require a university degree on Computer Science or a related subject, proof of special pedagogical aptitude, and special aptitude for scientific work for an appointment. Applicants must fulfill the employment qualification requirements of § 59 of the Institutions of Higher Education Act in the Free State of Saxony (SächsHSG).

For further questions, please contact the Dean of the Faculty of Computer Science, Mr Prof. Dr. Ivo Sbalzarini, phone: +49 351 463-38215; email: dekan.inf@tu-dresden.de, or the Executive Director of Barkhausen Institut gGmbH, Mr Prof. Dr. Gerhard Fettweis, email: gerhard.fettweis@barkhauseninstitut.org.

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. If you have any questions about these or related topics, please contact the Equal Opportunity Officer of the Faculty of computer Science (Ms Dr.-Ing. Iris Braun, email: gleichstellung.inf@tu-dresden.de, phone: +49 351 463 38063), the Equal Opportunity Officer of the Barkhausen Institut (Ms Dr. Patricia Grünberg, email: patricia.gruenberg@barkhauseninstitut.org), or the Representative of Employees with Disabilities (Mr Roberto Lemmrich, phone: +49 351 463-33175).

Please submit your application, including curriculum vitae in tabular form, description of your scientific career, a short research and teaching concept, a list of publications and the previous teaching activities including the results of the teaching evaluations (preferably of the last three years) as well as a copy of the certificate of your highest academic degree, preferably in electronic form (one PDF file) via the SecureMail Portal of TU Dresden (https://securemail.tu-dresden.de) to dekan.inf@tu-dresden.de or as a hard copy via regular mail to: TU Dresden, Fakultät Informatik, Dekan, Herrn Prof. Dr. Ivo F. Sbalzarini, Helmholtzstr. 10, 01069 Dresden, Germany by January 2, 2024 (stamped arrival date of the
university central mail service or the time stamp on the email server of TUD applies). Please enclose all documents in electronic form (CD or USB storage medium) with your postal application. The application documents will be made available to the responsible bodies at TUD and the Barkhausen Institut gGmbH.

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.