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 **Faculty of Electrical and Computer Engineering, Institute of Communication Technology**, the **Vodafone Chair of Mobile Communications Systems** offers a project position as **Research Associate (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 until June, 30, 2025 with the option of extension in sequent projects. The period of employment is governed by § 2 (2) Fixed Term Research Contracts Act (Wissenschaftszeitvertragsgesetz-WissZeitVG).

The Vodafone Chair of Mobile Communications Systems offers the opportunity to help shape the development of future mobile communication systems in a prosperous and dynamic environment, to gain valuable project experience and to establish and deepen contacts with innovative companies. Further information on the Vodafone Chair can be found at [https://mns.ifn.et.tu-dresden.de/](https://mns.ifn.et.tu-dresden.de/).

**Tasks:** you will be involved in research and evaluation of 6G radio design, encompassing:
- exploration of flexible architectures for 6G radio, including MIMO, beamforming, and multiband transceivers;
- development of adaptive and energy-efficient transmission schemes for 6G spectrum.
- design and evaluation of algorithms and techniques for joint communication and sensing
- development of proof-of-concept prototypes using software-defined radio.

These tasks are carried out in collaboration with partners from industry and academia, within the framework of national and European-funded projects. Additional responsibilities include participating in project meetings, contribution to project reports, and supervising student work related to the research topics. The research outcomes are expected to be published in distinguished journals and presented at international conferences and workshops.

**Requirements:** strong university degree in computer science, electrical engineering, communications engineering or information systems engineering; profound knowledge of wireless communications, communications engineering and digital signal processing; in-depth experience in programming with MATLAB or Python; independent, goal-oriented and solution-focused approach; integrative and cooperative behaviour with very good communication and social skills; confident command of both written and spoken English.

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 detailed application with the usual documents by **December 12, 2023** (stamped arrival date of the university central mail service or the time stamp on the email server of TUD applies) stating the **Job-ID:** "w23-446" preferably via E-Mail by sending it as a single pdf file to **jobs@ifn.et.tudresden.de** (Please note: We are currently not able to receive electronically signed and encrypted data.) or to: **TU Dresden, Fakultät Elektrotechnik und Informationstechnik, Institut für Nachrichtentechnik, Vodafone Stiftungsprofessur für Mobile Nachrichtensysteme, Herrn Prof. Gerhard Fettweis, 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.

**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://tudresden.de/karriere/datenschutzhinweis.**