

Faculty of Electrical and Computer Engineering

At the **Institute of Communication Technology**, the **Junior Professorship of Haptic Communication Systems** offers for the **Cluster of Excellence "Centre for Tactile Internet with Human-in-the-Loop" (CeTI)** a position as

Research Assistant / PhD student / Postdoc (m/f/d)

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

starting **as soon as possible**, limited for 36 months, max. December 31, 2025. The period of employment is governed by the Fixed Term Research Contracts Act (Wissenschaftszeitvertragsgesetz - WissZeitVG). The position offers the chance to obtain further academic qualification (e.g. PhD / habilitation thesis). Balancing family and career is an important issue. The position is generally suitable for candidates seeking part-time employment. Please indicate your request in your application.

Tasks: In the field of formal methods you realize research projects on your own initiative in a team and demonstrate them in practical applications of communication networks. You will be involved in the organization and implementation of projects in the Cluster of Excellence, write scientific publications and present research results at conferences.

Topics: The interdisciplinary Cluster of Excellence CeTI develops foundations for the next generation of the Internet: almost in real time, humans interact with cyber-physical systems (CPS) via intelligent communication networks. These foundations address current challenges of computer science and society, such as autonomous driving, teleoperation, or robotics. Due to the multitude of configuration options in modern computer systems, requirements for reliability and performance in communication networks cannot always be guaranteed. The goal of this position is, among others, to develop techniques of causal analysis and formal verification to identify configuration reasons for faults, their explanation, and adaptation of configurations to improve the performance of communication networks. The effectiveness of the techniques shall be demonstrated in practice. Other interdisciplinary research topics within the cluster may be addressed in consultation.

Requirements: very good university and, if applicable, PhD degree in computer science, electrical engineering, or mathematics. Strong background in at least one area related to the research topic, e.g., formal methods, causal reasoning, machine learning, theoretical computer science, programmable networks, and network technology. Furthermore, a structured way of working, the ability to advance projects independently and to communicate with all parties involved, as well as excellent written and oral communication skills in English are required.

Applications from women are particularly welcome. The same applies to people with disabilities.

Please submit your comprehensive application with the reference „**CeTI_Nguyen**“ including the usual documents by **October 7, 2022** (stamped arrival date of the university central mail service applies), preferably via the TU Dresden SecureMail Portal <https://securemail.tu-dresden.de> by sending it as a single pdf document to giang.nguyen@tu-dresden.de or to: **TU Dresden, Exzellenzcluster CeTI, z. Hd. Herrn Jun.-Prof. Giang T. Nguyen, 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://tu-dresden.de/karriere/datenschutzhinweis>.