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 **School of Embedded Composite AI (SECAI)**, a **DAAD Konrad Zuse School of Excellence in Artificial Intelligence** in cooperation with **Leipzig University** offers **six** positions as

Research Associate / PhD Student (m/f/x)
(subject to personal qualification employees are remunerated according to salary group E 13 TV-L)

starting **September 1, 2024.** The positions are limited to 3 years. The period of employment is governed by the Fixed Term Research Contracts Act (Wissenschaftszeitvertragsgesetz - WissZeitVG). The positions aim at obtaining further academic qualification (usually PhD). Balancing family and career is an important issue. The positions are generally suitable for candidates seeking part-time employment. Please indicate the request in your application.

Topics and Work Location: Researchers of several disciplines are collaborating in SECAI on advancing AI. The spectrum of available topics ranges from core areas of computer science and electronics over medical applications to societal aspects of AI. SECAI's main research focus areas are:
- ***Composite AI:*** *How can machine learning and symbolic AI methods be combined?*
- ***AI Compute Paradigms:*** *How will future AI hardware look and how will it be used?*
- ***Intelligent Medical Devices:*** *How can AI advance cybermedical systems?*
- ***AI Methods for Health:*** *How can AI methods support therapy and diagnostics?*
- ***Societal Framework of AI:*** *How can AI become trustworthy and free of legal risks?*

The location of work (Dresden or Leipzig) depends on the topic assigned for each position. Information about the available topics and supervisors can be found at https://secai.org/topics/.

Tasks: As a member of the SECAI graduate school, you are answering challenging research questions under the supervision of leading researchers and together with other teams members from Dresden and Leipzig. You develop your own research profile, publish and present your findings are international venues, and network with the international research community.

Requirements: very good research-oriented university degree in a discipline that is relevant to SECAI's research fields (e.g., computer science, mathematics, electronics, medical devices, bioinformatics, or law); fluency in English. Creativity, taking pleasure in research, and a sense for research quality and ethical behavior in research are an advantage. Please specify for which of the topics found at https://secai.org/topics/ you would like to apply.

Opportunities: SECAI offers a first-class environment for advancing your career. You can work with internationally renowned researchers and benefit from the school's strong networks in industry and research. The graduation of highly qualified researchers is a central project goal in SECAI and doctoral students receive strong support for their professional and personal development.

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 **May 31, 2024** (stamped arrival date of the university central mail service or the time stamp on the email server of TUD applies), preferably via the TUD SecureMail Portal https://securemail.tu-dresden.de by sending it as a single pdf file to **secai-office@tu-dresden.de** or to: **TU Dresden, Fakultät Informatik, Institut für Theoretische Informatik, Professur für Wissensbasierte Systeme, Herrn Prof. Dr. Markus Krötzsch, Helmholtzstr. 10, 01069 Dresden, Germany.** Please submit copies only, as your application will not be returned to you. Expenses incurred in attending interviews can be reimbursed upon prior invitation.