Dresden University of Technology

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 Computer Science** the **Chair of Computer Architecture** offers a position as

Research Associate (m/f/x)

for Low-Level-Benchmarks and Workload-Generators

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

starting **as soon as possible**. The position is limited to 48 months top. 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.

Tasks:

- development and extension of low-level benchmarks and workload generators for hardware components such as processors and memory
- design and implementation of interfaces for hardware and software model parameter exchange
- implementation and maintenance of energy measurement infrastructures
- assessment and evaluation of performance and energy models
- presentation of research results at professional conferences and science communication events
- preparation of and contribution to scientific publications and data publications
- project-related support of student projects

Requirements:

- university degree in computer science, information systems engineering, or a similarly suitable field with equivalent knowledge and skills
- practical experience with and knowledge of low-level programming languages, such as C and Assembly
- in-depth knowledge in the area of computer architecture, especially processor design
- ability to work in an interdisciplinary team
- interest in using AI-based tooling
- independent, structured and team-oriented working style
- fluent command of the German and English languages, both spoken and written
- experiences in the conception and execution of benchmarks and software/hardware evaluations are advantageous
- knowledge of electrical engineering is desirable

We offer:

- collaboration in a networked research environment as part of a research group with project partners from the National High Performance Computing Center
- a state-of-the-art data center infrastructure
- flexible working time models and und support in balancing family and career
- 30 days of vacation per year (within a 5-day working week)
- Job ticket / Job Germany ticket
- healthcare and sports activities of TUD

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. 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 quoting the reference number **w26-048** by **March 23, 2026** (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 **zih@tu-dresden.de** or to:

TU Dresden, Chair of Computer Architecture, Prof. Dr. Wolfgang E. Nagel, 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.

TUD is a founding partner in the DRESDEN-concept alliance.

DRESDEN concept

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.