

Technische Universität Dresden - Faculty of Computer Science, Institute of Theoretical Computer Science, Chair of Algebraic and Logical Foundations of Computer Science



TUD Dresden University of Technology, as a University of Excellence, is one of the leading and most dynamic research institutions in the country. 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.

Research Associate / PhD Student / PostDoc (m/f/x)

(subject to personal qualification, employees are remunerated according to salary group E 13 TV-L) At the Faculty of Computer Science, Institute of Theoretical Computer Science, the Chair of Algebraic and Logical Foundations of Computer Science offers, within the framework of the Collaborative Research Center (SFB)/Transregio 248 “Foundations of Perspicuous Software Systems” and subject to the availability of resources, a position as Research Associate / PhD Student / PostDoc (m/f/x) starting January 1, 2027 and limited until December 31, 2030. 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 (usually PhD / habilitation thesis). The Computer Science SFB/Transregio 248 lays the scientific foundations for cyber-physical systems of the future, enabling them to explain their functionality and behavior (so-called Perspicuous Systems). We are researching an in-depth and applicable theory of explanations for all facets of system behavior, as well as visual and verbal elucidation methods for diverse user groups. More information can be found at www.perspicuous-computing.science.

City: Dresden; Starting date (earliest): 01/01/27; Duration: limited until December 31, 2030; Remuneration: subject to personal qualification, employees are remunerated according to salary group E 13 TV-L; Reference number: w26-267; Closing date: 30/10/26

Tasks

The main tasks of the position are research on and development of certifying verification algorithms for stochastic and dynamical systems as well as formal methods for explainability and actionability.

Requirements

- university degree in computer science or related disciplines
- profound knowledge in theoretical computer science, preferably verification, automata theory, and logic
- very good foundations in mathematics
- structured method of working
- ability to advance projects independently and to communicate with everyone involved

- excellent written and verbal communication skills in English
- good programming skills and an interest in experimental tasks desirable

What we offer

- an interesting and diverse job in a collaborative project researching a highly topical subject
- flexible working hours
- 30 days of vacation per year (based on a 5-day workweek)
- extensive opportunities for professional development and continuing education
- health care and sports programs offered by TUD
- a discounted job ticket (also available as a Deutschlandticket)
- participation in the supplementary pension scheme for employees in the public sector via VBL (Federal and State Government Employees Retirement Fund)

Application

TUD strives to employ more women in academia and research. We therefore expressly encourage women to apply. The university is a 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.

Application: Please submit your detailed application with the usual documents by October 30, 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 professur-alg@tu-dresden.de or to:

TU Dresden, Chair of Algebraic and Logical Foundations of Computer Science,
Prof. Dr. Christel Baier, 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.

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>.

More information at <https://stellenticket.de/207917/TUBS/>
Offer visible until 30/10/26

