The **Institute of Theoretical Computer Science, Chair of Algebraic and Logical Foundations of Computer Science** invites, subject to resources being available, applications for a

**Research Associate / PhD Position / Postdoc**

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

within the framework of the Collaborative Research Center (SFB)/Transregio 248 „Foundations of Perspicuous Software Systems“, starting as soon as possible. The position is limited until 31.12.2022 with an option for extension. 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).

The Computer Science CRC/Transregio 248 lays the scientific foundations for the cyberphysical systems of the future, enabling them to explain their functionality and behavior (so-called Perspicuous Systems). We are researching a foundational 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.

**Tasks:** The main task is to establish and exploit the principles of composition and abstraction to arrive at an effective cause-effect analysis framework based on stochastic and timed automata.

**Requirements:** Applicants should have an excellent academic record and hold a university degree (MSc or equivalent) – and if applicable a PhD - in computer science or related disciplines. Profound knowledge in Theoretical Computer Science, preferably verification, formal modeling and quantitative analysis of systems, automata theory, logic, as well as a solid background knowledge in mathematics are required. Applicants are expected to have a structured way of working and advancing projects independently, a high commitment and excellent communication skills in German and English language.

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

Please submit your comprehensive application (including CV and statement of research interest) by **15.01.2019** (stamped arrival date of the university central mail service applies), preferably via the TU Dresden SecureMail [https://securemail.tu-dresden.de](https://securemail.tu-dresden.de) by sending it as a single pdf document to **secretary_alg@mailbox.tu-dresden.de** or by mail to: **TU Dresden, Fakultät Informatik, Institut für Theoretische Informatik, Professur für Algebraische und logische Grundlagen der Informatik, Frau 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.

---

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](https://tu-dresden.de/karriere/datenschutzhinweis)