Faculty of Computer Science

The Institute of Theoretical Computer Science, Chair of Automata Theory offers, subject to resources being available, in the context of the Collaborative Research Centre/Transregio 248 „Foundations of Perspicuous Software Systems“, two positions as Research Associate / PhD Student / Postdoc (subject to personal qualification, employees are remunerated according to salary group E 13 TV-L) starting at 01.03.2019. The positions are limited until 31.12.2022. The period of employment is governed by the Fixed Term Research Contracts Act (WissZeitVG). The positions are suitable for PhD Students as well as for Postdocs and offer the chance to obtain further academic qualification (e.g. PhD or 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 behaviour (so-called Perspicuous Systems). We are researching a foundational and applicable theory of explanations for all facets of system behaviour, 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 the work in sub-project A3, encompassing scientific research in the area of Knowledge Representation and Reasoning, in particular explaining logical deductions made by computer systems, and making them more comprehensible. The two positions further encompass work in either sub-project E1 or sub-project E2. In E1, in collaboration with the Chair of Multimedia-Technology at TU Dresden, the task is to develop interactive visualisations of the explanation methods. In E2, in collaboration with the Ubiquitous Media Technology Lab of Saarland University, the task is to develop application-specific ontologies and apply the explanation methods. Additional tasks include attending project meetings, interaction with the other sub-projects of the CRC/Transregio in Dresden and Saarbrücken, as well as (peer-reviewed) publication of the project results.

Requirements: Applicants should have an excellent academic record, and hold a university degree (MSc or an equivalent degree) in computer science or related disciplines. Fluency in spoken and written English is required. Applicants should have good knowledge of logic, in the context of either knowledge representation, description logic, or automated deduction. For the first position (A3&E1), knowledge of human-computer interaction or user modelling is desirable. For the second position (A3&E2), knowledge of ontology engineering, user modelling, or automated planning is desirable. Applicants should be capable of independent scientific work as well as working in teams and should be interested in interdisciplinary cooperation within the CRC/Transregio.

Applications from women are particularly welcome. The same applies to people with disabilities. Applications consist of a CV, the names of two referees, transcripts of documents summarising academic performance, and a statement of interest. Application by e-mail in pdf format is preferred, and should be submitted until 15.01.2019 (stamped arrival date of the university central mail service applies) to franz.baader@tu-dresden.de. Alternatively, applications can be sent to: TU Dresden, Fakultät Informatik, Institut für Theoretische Informatik, Herrn Prof. Dr.-Ing. Franz Baader, 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.