

The TU Darmstadt is one of Germany's top technical universities with an outstanding nation-wide and international reputation in research and education. The chair Modeling and Analysis of Information Systems (MAIS) in the Department of Computer Science is led by Prof. Dr.-Ing. Heiko Mantel. The overall research objective of MAIS is to make software-based systems more trustworthy. We are offering a



Ph.D. Position in Security of Concurrent Programs.

As a successful applicant, you will contribute to verifying security guarantees for concurrent programs. Your research will focus on formal program analyses and their semantic foundations. The challenge will be to take particularities of concurrent programming languages and parallel hardware architectures into account in a faithful manner. Your research could focus on a selection of the following themes: semantics of concurrent programs, concurrent algorithms, hardware description languages, and program analysis for information flow security.

For this position, you should hold a M.Sc. degree in Computer Science or a closely related field. A solid background in formal methods and logic is required. A background in information security or concurrency theory will be helpful, but is not a prerequisite. Prior knowledge in any of the following areas is also a plus: automated verification, hardware description language, information flow security, and program analysis. Language skills in English are expected. Knowledge of German is not a prerequisite, but you should be willing to learn German within the first year. Candidates should be highly motivated to tackle challenging research topics and to contribute to an open-minded team.

The position is a regular job with social benefits. The salary will be based on the TV-TU Darmstadt public service salary scale (similar to TV-L).

Work at MAIS. We offer a productive and continuously evolving research environment, in which you can discuss ideas with team members who are working on related topics. Our international connections as well as our involvement in leading-edge research projects, for example the DFG priority program Reliably Secure Software Systems (RS³), the Center for Advanced Security Research Darmstadt (CASED), and The European Center for Security and Privacy by Design (EC SPRIDE), provide further opportunities for collaborations.

How to apply? Please submit your application, preferably on paper, including your detailed CV (stating your language skills in English and German), complete educational transcripts with grades and degrees (copies, no originals), description of your background and your research interests, and, if possible, the contact information of one or two references to Prof. Dr.-Ing. Heiko Mantel, TU Darmstadt, Department of Computer Science, Hochschulstraße 10, 64289 Darmstadt, Germany (mantel@cs.tu-darmstadt.de).

Deadline for applications is 12 June 2013. However, we will consider applications until the position is filled. The position is available immediately but a later start is also possible.

TU Darmstadt is an equal opportunities employer and encourages applications from women. In case of equal qualifications, applicants with a degree of disability of at least 50 will be given preference.

More information on MAIS is available at <http://www.mais.informatik.tu-darmstadt.de>
In case of questions, please contact us by e-mail (recruiting@mais.informatik.tu-darmstadt.de)