



PhD-Positions



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The Technische Universität 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 (brief: MAIS) was founded in 2007 as part of Theoretical Computer Science. Prof. Dr. Heiko Mantel is the scientific coordinator of the DFG priority programme 'Reliably Secure Software Systems' (brief: RS³). In the context of the RS³-Project 'Reliable Security for Concurrent Programs', the MAIS group is offering

2 Positions for PhD-Students (Doktorandenstellen).

What is the project about? Information flow control is the basis for a property-centric and semantically well-founded approach to IT security. While Information flow security for sequential programs is a non-trivial problem, the conceptual complexity of concurrent systems poses additional challenges and makes it particularly desirable to obtain reliable security guarantees. This project addresses the formal assurance of security guarantees for concurrent programs based on declarative information flow properties and reliable program analyses. It aims at a novel framework for adequately characterising security aspects by noninterference-like information flow properties as well as for analysing and certifying the security of concurrent programs based on well-founded semantics.

The position As a suitable candidate, you hold a Master's degree (or equivalent) in Computer Science or Mathematics. For all our research topics, a solid background in formal methods or logic is required. A background in information security will be helpful, but is not a prerequisite. Prior knowledge in any of the following areas is also a plus: automated verification, concurrency theory, program analysis, and semantics of programming languages. Candidates should be highly motivated to tackle challenging research topics and to contribute to an openminded team.

We offer a productive and continuously evolving research environment, in which you can discuss ideas and collaborate with team members who are working on related research topics. Our international connections as well as our involvement in interesting research projects provide further opportunities for inspiration and collaborations. The publication of your research results at highly ranked conferences will be expected and supported. The positions offered are regular jobs with social benefits. The salary will be based on the TV-TU Darmstadt public service salary scale (equivalent to former BAT Iia and TV-L). German language skills are not required in the beginning, but the willingness to learn German within the first year is expected.

How to apply Please submit your application, preferably on paper, including your detailed CV (including 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. Heiko Mantel, TU Darmstadt, Department of Computer Science, MAIS Group, Hochschulstraße 10, 64289 Darmstadt, Germany.

Deadline for applications is the 15th of November 2010. 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 welcomes applications from women. Handicapped persons having the same qualification will be preferred.

More information 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).