

TU Darmstadt is one of Germany's top technical universities with an outstanding nationwide and international reputation in research and education. The chair Modeling and Analysis of Information Systems (MAIS) 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

PostDoc Position in Concurrent Program Security.

We are looking for a researcher who is interested in theoretical and practical aspects of information-flow security for concurrent programs. The position will involve the development of program analyses for verifying information-flow security, semantic foundations, and program analysis tools. Multiple research directions are possible. The spectrum of possible research foci includes rely-guarantee reasoning about the security of multi-threaded programs, information-flow security under weak memory models, static and hybrid information-flow analyses for concurrent programs, verifying the soundness of information-flow analyses in Isabelle/HOL or Coq, and information-flow guarantees for concurrent Android apps. Your research could build on our prior work in these directions (available on our publications webpage).

Ideally, you should have a solid background in at least two of the following areas: formal methods in Computer Science, information-flow security, program analysis, and semantics of concurrent programs. A background in information security is helpful, but not a prerequisite. You should be highly self-motivated, be interested in tackling challenging research problems, have organizational skills, be open-minded, and have scientific leadership potential. Language skills in English are expected. You do not need to know the German language, but should be willing to obtain basic skills within a year.

You must hold a Ph.D. or have completed all requirements for your Ph.D. when the appointment begins.

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 and our involvement in leading-edge research projects (like RS³, CASED, CROSSING, and EC-SPRIDE), provide further opportunities for collaborations. The position is associated with an ongoing project.

How to apply? Please submit your application, including your detailed CV (stating your language skills in English and German), a research statement (describing your background and your research interests wrt. this position), a list of your publications, a list of your scientific talks, complete educational transcripts with grades and degrees (copies, no originals), and, if possible, the contact information of one or two references by e-mail to recruiting@mais.informatik.tu-darmstadt.de or by mail to Prof. Dr.-Ing. Heiko Mantel, TU Darmstadt, Department of Computer Science, Hochschulstraße 10, 64289 Darmstadt.

The position is available from November 15, but a later start is also possible. We will consider applications until the position is filled. This 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).

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).