PhD Student / Research Assistant (m/f)

Job description:

The research group Cryptography and IT Security of the Institute of Theoretical Informatics (ITI) at KIT has an opening for a PhD position in the scope of the project "CyPhyCrypt: Advanced Crypto for New and Next-Generation Cyber-Physical Systems" (PIs: Dr. Andy Rupp, Prof. Christof Paar). This project is fully funded by the German Research Foundation (DFG). It deals with the development of novel CPS security mechanisms with provable security guarantees and computational requirements that can be met in practical settings, based on sound advanced cryptographic constructions (e-cash, anonymous reputation systems, optimistic fair-exchange, etc.).

The PhD candidate will be working on security models for the considered CPS as well as on cryptographic constructions which can be shown secure in these models. Apart from the Cryptography and IT Security group at KIT (headed by Profs. Jörn Müller-Quade and Dennis Hofheinz), the candidate will also be closely collaborating with the Chair of Embedded Security at Ruhr-University Bochum (headed by Prof. Christof Paar), where a second PhD student will be working on the implementation aspects of this project.

Qualification:

- Very good university degree (Master or equivalent) in Computer Science or Mathematics.
- Solid background in provable security, e.g., demonstrated by excellent grades in corresponding postgraduate courses or by publications.
- Self-motivation, team spirit, and willingness to work in interdisciplinary projects.

Salary:

The remuneration occurs on the basis of the wage agreement of the civil service in TV-L, E 13.

Institute:

Department of Informatics, Institute of Theoretical Informatics, Research Group Cryptography and IT Security.

Contract duration:

Limited to three years.

Starting date:

As soon as possible

Application up to:

15.04.2016

Contact person in line-management:

Dr.-Ing. Andy Rupp, Tel: +49 721/608-41862

Application:

Please send your application (CV, transcripts and certificates, names of references) by e-Mail to: andy.rupp@kit.edu

KIT is an equal opportunity employer. Women are especially encouraged to apply. Applicants with disabilities will be preferentially considered if equally qualified.