Saarland University is a campus university with an international reputation for research excellence, particularly in computer science and in the life sciences and nanosciences. The university is also distinguished by its close ties to France and its strong European focus. Around 17,000 students, studying over one hundred different academic disciplines, are currently enrolled at Saarland University. Saarland University is officially recognized as one of Germany's family-friendly higher-education institutions and with a combined workforce of more than 4000 it is one of the largest employers in the region.

The Department of Computer Science is inviting applications for the following position commencing at the earliest opportunity.

## Academic research assistant (m/f/x)

**Reference number W2465**, salary in accordance with the German TV-L salary scale[1], pay grade: E13 TV- L, duration of employment: 36 months, volume of employment: 100 % of standard working time.

### Workplace/Department:

With 900 researchers and 2500 students from 81 countries, Saarland Informatics Campus is one of the leading locations for Informatics in Germany and in Europe. As part of the ERC Advanced Grant "Abstractions for Safe and Secure HW/SW Systems" (https://cordis.europa.eu/project/id/101020415) the group of Prof. Reineke is seeking a highly motivated postdoctoral scholar.

### Job requirements and responsibilities:

- Research on program analysis of security and/or real-time properties. We are particularly interested in microarchitectural security (cache side channels, Spectre, Meltdown, etc.) and timing predictability (cache and pipeline analysis).
- Research on the design and verification of processors with provable security (in particular w.r.t. side channel leakage) and timing-predictability properties (enabling their use in hard real-time systems).
- We have a track record of high-impact publications in these areas (recent papers at CAV, POPL, PLDI, RTSS, S&P, CCS, USENIX Security, including best paper awards at S&P 2021 and RTSS 2019).
- The concrete research topic is flexible and will be shaped based on background and interests of the candidate.

### Your academic qualifications:

- Doctoral degree / PhD Computer Science or a related field

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[1] TV-L = collective agreement on remuneration of public sector employees in the German *Länder*
The pay grade assigned to an employee depends on their professional qualifications and the number of years of service. Each pay grade is further subdivided into levels. Entry-level employees with no previous experience will initially be assigned a level 1 rating. After one year at level 1 of the E10 pay grade, an employee will move up to level 2. After a further two years, the employee will move to level 3, etc.

- Language skills (according to GER): English-C1

**The successful candidate will also be expected to:**
- Research experience in computer security, formal methods, or real-time systems
- Course or research background in formal methods (e.g. verification, model checking, abstract interpretation, fuzzing, or real-time analysis), computer architecture, or computer security
- Strong verbal and written communication skills
- Independence and "drive" to perform research and to publish in high-impact venues

**What we can offer you:**
- A flexible work schedule allowing you to balance work and family, among other things the possibility of teleworking
- Secure and future-oriented employment with attractive conditions
- A broad range of further education and professional development programmes (for example language courses)
- An occupational health management model with numerous attractive options, such as our university sports programme
- Supplementary pension scheme (RZVK)
- Discounted tickets on local public transport services ('Job-Ticket Plus' of the saarVV)

We look forward to receiving your application by **11.05.2024**. The application should include a letter of motivation, curriculum vitae, transcript of records, and at least two academic references. Applications should be sent in a single PDF file to **reineke@cs.uni-saarland.de**. Please include the reference number **W2465** in the subject line of the e-mail.

If you have any **questions**, please contact us for assistance. Your contact:
Prof. Jan Reineke
E-Mail: reineke@cs.uni-saarland.de

Pay grade classification is based on the particular details of the position held and the extent to which the applicant meets the requirements of the pay grade within the TV-L salary scale. Part-time employment is generally possible.

If you have obtained a foreign university degree, a proof of the equivalence of this degree with a German degree by the Zentralstelle für ausländisches Bildungswesen (ZAB) is needed before hiring. If necessary, please apply for this in time. You can find more information at https://www.kmk.org/zeugnisbewertung.

Unfortunately, neither costs for attending an interview at Saarland University nor costs for any certificate evaluation by the ZAB can be reimbursed in principle.

We welcome applications regardless of gender, nationality, ethnic and social origin, religion/belief, disability, age, and sexual orientation and identity. In accordance with its policy of increasing the proportion of women, the University actively encourages applications from women. Applications from severely disabled persons will be given preferential consideration in the event of equal suitability.

When you submit a job application to Saarland University you will be transmitting personal data. Please refer to our privacy notice for information on how we collect and process personal data in accordance with Art. 13 of the Datenschutz-Grundverordnung. By submitting your application you confirm that you have taken note of the information in the Saarland University privacy notice.