Barkhausen Institut gGmbH - Internet der Dinge

barkhausen institut

The Barkhausen Institut performs research on the latest hardware, software and communication technologies and demonstrates their application in tomorrow's society. Our goal is to build a flexible and trustworthy IoT platform based on reliable electronics and secure communication methods.

Research Associate (PhD or Postdoc) "Trusted Execution Environments" (m/f/d)

City: Dresden; Starting date (earliest): At the earliest possible; Duration: The position will initially be filled for a period of 2 years.; Remuneration: €4.759,37 and €6.764,69; Reference number: Research Associate TEE OS

Tasks

- Besides contributing your unique ideas, you will work at the level of operating system components and cryptographic protocols to support us in our vision of building secure and efficient platforms:
- Design and implementation of system-level software for trusted execution
- Interaction with hardware design regarding attestation and root-of-trust
- System design using microkernel principles
- Development of use cases and IoT demonstrators
- Participation in writing research publications and project deliverables
- Engagement in Science Communication: In cooperation with our OpenLab team, you will participate in activities that aim to explain research results in dialog with society.

Requirements

- Above-average MSc/Diploma and PhD degree in areas related to our research focus (Computer Science) from renowned universities.
- An integrative and cooperative personality with excellent communication and social skills.
- Good communication and writing skills in English.
- Knowledge in the following domains:
- Good programming skills in C/C++ and/or Rust
- Good knowledge of operating systems and secure systems concepts
- Good knowledge of cryptographic primitives and remote attestation

- Knowledge of microkernel-based system design principles

You are interested, but you don’t think you meet all the requirements of the job posting? Then you should know: We don’t hire resumes, we hire people. We are looking for potential and want to actively foster it. That‘s why we encourage you to apply!

What we offer

- Cross-disciplinary projects
- Influential work on upcoming technologies
- An open and creative team
- Agile working hours and workflows
- Flat hierarchies for your ideas to soar
- Competitive salary
- Our remuneration is based on the collective agreement for the federal states. If you meet all the professional requirements (diploma/master's degree or doctorate), this position is classified as TV-L E 13. Depending on your professional experience, the basic monthly salary ranges between €4.759,37 and €6.764,69. We will be happy to provide more details during the interview.

If you have passion for new technologies and the desire to develop the connected world of tomorrow with us, we are looking for you.

Life and science are compatible at our institute. We offer a range of recognised family-friendly measures, such as part-time work, mobile working and flexible working hours that take family needs into account. We also offer support for arriving in Dresden (all formalities, apartment etc.).

Application

Your application should include: motivation letter explaining your decision to apply at the institute, CV, copy of university degree and PhD certificate, short summary of doctoral thesis, list of publications.

Applications from women are particularly welcome. We only accept complete documents as one single PDF document by e-mail to careers@barkhauseninstitut.org. Please reference “Research Associate TEE OS” in the subject line. Applications that contain other file formats (e.g. Word, Excel) will not be considered in the selection process. Informal inquiries can also be submitted to the same address.

The data submitted by you in the course of the application procedure will be processed by the Barkhausen Institut (BI). BI shall use the data for the purposes of the application procedure. No data shall be passed on to third parties.

Reference number: Research Associate TEE OS

By email: careers@barkhauseninstitut.org