

Barkhausen Institut gGmbH - Internet of Things



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. The Trustworthy Data Processing group at the Barkhausen Institut is seeking a highly motivated candidate to pursue a PhD in secure and privacy-preserving machine learning and AI. At the earliest possible date we are looking for a

PhD Position in Secure and Privacy-Preserving Machine Learning / AI (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: TV-L E-13; Reference number: PhD Position in Secure and Privacy-Preserving Machine Learning / AI

Tasks

The position combines academic research with practical system development, including developing new methods, implementing prototypes, and evaluating their security, privacy, and efficiency. The position aims at supporting further academic qualification (e.g. PhD).

- Conduct research in secure and privacy-preserving machine learning and AI towards a PhD.
- Develop and evaluate methods and prototypes and publish research findings.
- Contribute to collaborative research projects, including preparing project deliverables and reports.
- Present research findings at conferences, workshops, and project meetings.

Requirements

- Above-average university degree in the field of our research focus (cryptography, security, privacy)
- A strong academic background and relevant research experience;
- Programming experience and an interest in developing research prototypes;
- An interest in combining scientific research with practical system development.
- Very good written and spoken English skills
- We especially welcome applicants with a background in both of the following areas:
 - Privacy-enhancing technologies, such as homomorphic encryption, trusted execution environments, and secure computation;
 - Machine learning and AI

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

- An open and creative team
- Agile working hours and workflows
- Cross-disciplinary projects
- Work on future technologies
- Flat hierarchies for your ideas and flexible teams
- Our remuneration is based on the collective agreement for the federal states. If you meet all the professional requirements (diploma/master's degree), this position is classified as TV-L E 13. Depending on your professional experience, the basic monthly salary ranges between €4,629 and €6,580. 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 including a short statement outlining your research interests and relevant experience, CV, copy of university degree certificate, short summary of Master thesis.
- Barkhausen Institut strives for gender and diversity equality. We welcome applications from all backgrounds. Severely disabled persons are given preference in the event of equal suitability.
- We only accept complete documents as one single PDF document by e-mail to careers@barkhauseninstitut.org. Please reference "PhD Position in Secure and Privacy-Preserving Machine Learning / AI" 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.
- If you have any content-related questions regarding the job advertisement, you can contact Maryam Zarezadeh at maryam.zarezadeh@barkhauseninstitut.org.
- Please apply until October 31, 2026.

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.

More information at <https://stellenticket.de/207929/TUD/>
Offer visible until 12/11/26

