



Technische Universität Berlin



Technische Universität Berlin offers an open position:

Research Assistant – salary grade E13 TV-L Berliner Hochschulen - 1st qualification phase (for doctorate)

Part-time employment may be possible; subject to the position becoming vacant

Faculty IV - Institute of Telecommunication Systems / Internet Architecture and Management (INET)

Reference number: IV-312/25 (starting at 01/12/25 / limited for 5 years / closing date for applications 15/08/25)

Working field:

Our research group Internet Architecture and Management (INET) at TU Berlin conducts research at the intersection of networked and distributed systems, with a main emphasis on fundamental aspects. Our vision is that networked systems should become self-* (i.e., self-configuring, self-repairing, self-optimizing). Accordingly, we are currently particularly interested in automated and data-driven approaches to design, optimize, and verify networked systems.

Networked systems have become a critical infrastructure of our digital society, and accordingly, they must meet high standards of reliability and security. These requirements often stand in stark contrast to the current design and mode of operating such systems. Indeed, many systems today are vulnerable to attacks,

The research work will focus on blockchain networks, such as those of cryptocurrencies like Bitcoin, Monero, or the Internet Computer. These networks are to be better understood through empirical measurements, with the goal of making them more efficient and secure. The specific research topic can be tailored to your interests. The role also includes supervising courses and final theses.

We are particularly interested in topics such as:

- Internet measurements, especially measurements of blockchain peer-to-peer networks,
- Security analyses and protocol development,
- Bitcoin, Monero, payment channel networks,
- DAOs and governance

Requirements:

We are looking for a motivated research assistant who wants to make significant contributions to the security of distributed and networked systems, with the goal of pursuing a doctorate.

- Successfully completed university degree (Master, Diploma or equivalent) in computer science or computer engineering or a related field is required.
- Proficiency in communication networks (e.g., Internet, P2P, DNS, BGP) is required.
- Proficiency in blockchain technologies (e.g., Bitcoin, Monero) is required.
- Competence in empirical studies and measurements is required.
- Solid background in aspects of network security is required.
- The ability to teach in German and/or in English is required; willingness to acquire the respective missing language skills.
- Experience with research methods is a plus.
- Experience in teaching and pedagogy is a plus.
- Ability to work in an international team and strong communication skills are desired.

Please send your written application with the **reference number** and the usual application documents preferably by email to jobs@inet.tu-berlin.de or by post to **Technische Universität Berlin - Die Präsidentin - Fakultät IV, FG Internet Architecture and Management, Prof. Dr Stefan Schmid, Sekr. EN 18, Einsteinufer 17, 10587 Berlin**.

By submitting your application via email you consent to having your data electronically processed and saved. Please note that we do not provide a guarantee for the protection of your personal data when submitted as unprotected file. Please find our data protection notice acc. DSGVO (General Data Protection Regulation) at the TU staff department homepage: https://www.abt2-t.tu-berlin.de/menue/themen_a_z/datenschutzerklaerung/.

To ensure equal opportunities between women and men, applications by women with the required qualifications are explicitly desired. Qualified individuals with disabilities will be favored. The TU Berlin values the diversity of its members and is committed to the goals of equal opportunities. Applications from people of all nationalities and with a migration background are very welcome.

The vacancy is also available on the internet at <https://www.personalabteilung.tu-berlin.de/menue/jobs/>

