



# RESEARCH ASSOCIATE FOR THE PROJECT "SOVEREIGN" IN THE FIELD OF IT-SECURITY, SECURITY MONITORING, AND COLLECTIVE CYBER-DEFENSE FOR CRITICAL INFRASTRUCTURES § 28 SUBSECTION 3 HMBHG

**Institution:** Faculty of Mathematics, Informatics and Natural Sciences, Department of Informatics, Research Groups Security in Distributed Systems and Computer Networks

Salary level: EGR. 13 TV-L

**Start date:** as soon as possible, fixed until 31.08.2027 (This is a fixed-term contract in accordance with Section 2 of the academic fixed-term labor contract act [Wissenschaftszeitvertragsgesetz, WissZeitVG]).

Application deadline: 2025-04-10

Scope of work: full-time position suitable for part-time

# Your responsibilities

Duties include academic services in the project named above. Research associates may also pursue independent research and further academic qualifications.

The activity includes the scientific collaboration in the third party funded project "SOVEREIGN: Technologisch souveräne Security-Monitoring- und Cyber-Defense-Plattform für kritische und komplexe Infrastrukturen" (technological sovereign security monitoring and cyber defense platform for critical and complex infrastructures). The focus is on the development of a collaborative and privacy-friendly platform for the detection and defense of attacks on critical and complex infrastructures. Together with other project partners, this platform will be designed, implemented, analyzed, and evaluated. In addition, the position holder will continuously contribute to the publication and presentation of research and project results. As a research-intensive department, our research results are also directly incorporated into teaching.

More specifically, own research in the scope of the project can fall into the following categories:

- scalable security monitoring and intrusion detection to detect targeted attacks and APTs
- statistical and AI-based methods to detect, assess, and forecast the further course of targeted attacks
- privacy-friendly methods to create and exchange threat intelligence information (tactics, techniques, procedures, and cases) also in the form of machine learning models (federated learning) that for example describe a certain component/subsystem
- methods for (semi-) automatic network defense that can adapt to and stop (targeted) attacks

# Your profile

A university degree in a relevant field.

Profound knowledge in the security of distributed systems and networks as well as basic knowledge in cryptography and security protocols are required. Basic knowledge in security monitoring and intrusion detection, the application and implementation of machine learning techniques, experience with embedded systems and the IoT, as well as prior experience in the study of security and privacy on the Internet and in mobile systems are advantageous. Programming skills in higher level programming languages such as Java, C/C++, and Python are required.

### We offer



Reliable remuneration based on wage agreements



Continuing education opportunities



University pensions



Attractive location



Flexible working hours



Work-life balance opportunities



Health management, EGYM Wellpass



Educational leave



30 days of vacation per annum

Universität Hamburg — University of Excellence is one of the strongest research educational institutions in Germany. Our work in research, teaching, educational and knowledge exchange activities is fostering the next generation of responsible global citizens ready to tackle the global challenges facing us. Our guiding principle "Innovating and Cooperating for a Sustainable Future in a digital age" drives collaboration with academic and nonacademic partner institutions in the Hamburg Metropolitan Region and around the world. We would like to invite you to be part of our community to work with us in creating sustainable and digital change for a dynamic and pluralist society.

The Free and Hanseatic City of Hamburg promotes equal opportunity. As women are currently underrepresented in this job category at the University of Hamburg according to the evaluation conducted under the Hamburg act on gender equality (Hamburgisches Gleichstellungsgesetz, HambGleiG), we encourage women to apply for this position. Equally qualified and suitable female applicants will receive preference.

Severely disabled and disabled applicants with the same status will receive preference over equally qualified non-disabled applicants.

# **Instructions for applying**

### **Contact**

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### Location

Vogt-Kölln-Str. 30 22527 Hamburg <u>Zu Google Maps</u>

## Reference number

105

# **Application deadline**

2025-04-10

Use only the online application form to submit your application with the following documents:

- cover letter
- CV
- copies of degree certificate(s)

If you experience technical problems, send an email to <a href="mailto:bewerbungen@uni-hamburg.de">bewerbungen@uni-hamburg.de</a>.

More information on <a href="mailto:data-protection">data-protection</a> in selection procedures.



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