



Technische Universität Berlin offers an open position:

### **Student assistant (40/60/80 hours per month)**

Number of identical posts to be advertised: 4

#### **Faculty IV - Institute of Telecommunication Systems**

**Reference number:** IV-SB-0065-2023D (starting at the earliest possible / limited for two years / closing date for applications 10/01/26)

#### **Working field:**

The Chair "Internet Architecture and Management" conducts research at the intersection of networked and distributed systems, with a main emphasis on fundamental and algorithmic 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.

#### **Tasks:**

We are looking for student workers interested in the topics of our research group and who would like to support the researchers of our group with the following tasks:

- Implementing protocols in a network simulator or Linux Kernel, C/C++/Python (40%),
- Conducting experiments on a real testbed or in network simulators to evaluate a set of protocols (20%),
- Generating plots using the given data (10%),
- Tabulating related work in a specific area (10%),
- Creating models (based on a given Linear Program) in solvers such as Gurobi (20%).

#### **Requirements:**

- Good knowledge of linux, bash and python scripting is required.
- Basic knowledge to work with files and contents using bash scripts for data post processing is required.
- Good knowledge of Python plotting eg., matplotlib, seaborn is required
- A strong networking background with good understanding of TCP/IP is required.
- Prior experience with NS3 or optionally OMNET++ is desired.
- Prior experience with Linux Kernel development or P4 programming or Machine learning libraries is desired.
- Solid background in C and C++ is desired.
- Background in queueing theory and/or congestion control and/or control systems is/are a plus.
- Good English language skills, oral as well as written skills, are required.

**Party responsible for specialist area / point of contact for job posting:** Prof. Stefan Schmid

**Period of employment:** immediatley, limited for two years

Please submit your written application including your CV, certificate of enrollment, and where applicable, current transcript of records, to the place of employment indicated above.

In the interest of promoting equality opportunities for men and women, applications from women with suitable qualifications are particularly encouraged.

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

