



# Technische Universität Berlin



hochschule

Technische Universität Berlin is currently advertising the following position(s):

# Student assistant (60 hours per month)

Number of identical posts to be advertised: 3

# Faculty IV: Electrical Engineering and Computer Science - Institute of Software Engineering and Theoretical Computer Science

**Reference number:** IV-SB-0072-2024 (starting at the earliest possible / limited for two years / closing date for applications 28/10/24)

#### Working field:

Supporting activities (e.g. literature research, implementation of ideas as software prototypes, evaluation of software prototypes through experiments) on one of the following research topics within the Programming Languages group:

- Compiler construction with the MLIR framework
- New methods for automating compiler construction
- · New techniques for compiler optimisation, in particular equality saturation and machine learning methods
- Design and implementation of a new programming language for GPUs

#### Requirements:

Must-have criteria:

- The ability to work on research topics under supervision, but also independently
- Programming experience in a functional language (e.g., Haskell or Scala) as well as in an imperative language (e.g., Rust or C/C++)
- · Good knowledge of English in word and writing

### Optional criteria:

- Experience with compiler construction (e.g. through the lecture Compiling Techniques)
- · Experience with type systems, formal methods or machine learning
- · Reliability and creativity

## Party responsible for specialist area / point of contact for job posting:

Period of employment: immediately for 2 years

Apply to: petra.dudakova@tu-berlin.de

Please submit your written application including cover letter, your CV, certificate of enrollment, and where applicable, current transcript of records, with the reference number 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/