



# Technische Universität Berlin



Technische Universität Berlin offers an open position:

# Student assistant (40 - 80 hours per month)

Number of identical posts to be advertised: 2

Fakultät IV: Elektrotechnik und Informatik - Institut für Technische Informatik und Mikroelektronik - Intelligente Systeme

**Reference number:** IV-SB-0013-2025 (starting at the earliest possible / limited to 2 years / closing date for applications 27/03/25)

#### Working field:

We are offering two identical positions. 40, 60 or 80 hours/month possible.

Supporting the research in the Intelligent Systems department, e.g.

- in performing robotics experiments, testing and integrating the code infrastructure of the lab,
- in re-implementing existing robotics and robot perception algorithms,
- in the development, integration, and testing of perception algorithms for robotics, the development of neural systems for implicit scene/object representations, the construction of such representations from raw data, and their use for planning and in real-time robot control,
- in the development of algorithms for meta-optimization and the generation of random problems (~evolutionary methods) for testing and optimizing the planning and control capabilities of robots in large, simulated, automatically generated problems,
- in hardware and control development for a mobile robot platform, system integration of the mobile base, and a manipulator.

### Requirements:

#### Must:

- very good mathematical basics (esp. linear algebra, numerical algorithms)
- excellent programming skills (C++ and/or Python); Linux knowledge excellent written and spoken English skills

## Can:

- · reliability, self-reliance and ability to work in a team
- advantageous: experience in one of the following areas: Programming of robots as well as basic knowledge in robotics (e.g. kinematics, dynamics, planning, probabilistic methods); computer vision and neural representations; optimization algorithms and simulation; mechatronics as well as enthusiasm for building "real things".

Party responsible for specialist area / point of contact for job posting: Prof. Dr. Marc Toussaint / Frau Ilaria Cicchetti-Nilsson

Period of employment: immediately for 2 years

Apply to: i.cicchetti-nilsson@tu-berlin.de

Please send your application - preferably in English - with the following documents in a single PDF document with the reference number in the subject line to i.cicchetti-nilsson@tu-berlin.de: Letter of motivation, curriculum vitae, link to relevant code samples (e.g. GitHub repository).

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/

