



**Technische Universität Berlin**



Technische Universität Berlin offers an open position:

### **Student assistant (60 hours per month)**

Number of identical posts to be advertised: 3

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

**Reference number:** IV-SB-0019-2025 (starting at the earliest possible / closing date for applications 01/05/25)

#### **Working field:**

Supporting the scientific team of the Intelligent Systems department working on a cooperation project with Charité (project name: "REPAIR"). The project develops AI methods for operation planning in surgery. Methodologically, 3D image processing, learning and optimisation are particularly relevant. The interdisciplinary project offers direct collaboration with surgeons and radiologists at Charité. Specific tasks include:

- Support in the further development of a software created at our department for the processing of 3D CT images, of learning algorithms for the prediction of reconstructed fractures, and of optimisation methods for surgical planning (50%)
- Support in the further development of software interfaces created at our department that can be used by non-experts. Support with the project's software infrastructure (30%)
- Support of the team in the further development of AI methods created at our department (20%)

#### **Requirements:**

Must:

- Very good mathematical foundations (esp. linear algebra, numerical algorithms, machine learning).
- Very good programming skills (Python and/or C++), esp. in the context of machine learning and image processing (e.g. pyTorch); Linux skills
- Very good written and spoken English skills.

Can:

- Reliability, self-reliance and ability to work in a team

Application:

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](mailto:i.cicchetti-nilsson@tu-berlin.de):

- Cover letter with links to examples of your previous written and/or practical work (e.g. link to your BSc/MSc thesis or a project report, and/or link to a GitHub repository).
- Curriculum vitae

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

**Period of employment:** immediately - 31.01.2026

**Apply to:** [i.cicchetti-nilsson@tu-berlin.de](mailto:i.cicchetti-nilsson@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/menuue/jobs/>

