



Technische Universität Berlin



Technische Universität Berlin offers an open position:

Research Assistant - salary grade E13 TV-L Berliner Hochschulen- 1st qualification phase (PhD candidate)

part-time employment may be possible

Join the 'Berlin Institute for the Foundations of Learning and Data' (BIFOLD; www.bifold.berlin) as a doctoral researcher, where you will contribute to cutting-edge research in Data Management, Machine Learning, and their intersection. BIFOLD conducts scalable agile fundamental research in the field of AI in the German AI metropolis of Berlin. The institute is part of the network of six national competence centers for artificial intelligence research in Germany. Their joint task is to further establish Germany's leading position as top-tier location for research on AI technologies.

Faculty IV - BIFOLD / Remote Sensing Image Analysis

Reference number: IV-223/25 (starting at the earliest possible / for 5 years / closing date for applications 20/06/25)

Working field:

At the Big Data Analytics for Earth Observation group (<https://rsim.berlin>) of BIFOLD, we are seeking to hire a Research Associate (Doctoral Researcher) interested in the design and development of foundation models for Earth observation. The selected candidate will focus on foundational research and current challenges in this field, including the development of novel algorithms and methods, as well as prototype systems and software tools. Possible topics include multi-modal and cross-sensor representation learning; parameter-efficient finetuning of foundation models; merging of foundation models; and continual learning in the framework of foundation models.

The employment relationship is related to the regular teaching obligation (§ 5 para. 1 no.4 LVVO). Participation in the AI Competence Centre BIFOLD requires a special aptitude for working in research. The tasks at BIFOLD can justify according to § 1 S.2 LVVO a reduction in teaching duties.

Requirements:

- Successfully completed academic university degree (Master, Diplom or the equivalent) in computer science (e.g., theoretical, methodological-practical, or technical computer science),
- Knowledge of machine learning theories and methods (e.g., core methods, deep neural networks), practical experience in developing and applying ML algorithms, experience with linear algebra / neural network frameworks (e.g., NumPy, PyTorch, TensorFlow, JAX),
- Experience in remote sensing image analysis and some knowledge on large language models.
- Good programming skills (e.g., Python, Java, C/C++),
- The ability to teach in German and/or in English is required; willingness to acquire the respective missing language skills.

Desirable:

- Strong communication skills
- Early experience in research and paper writing
- Experience in teaching and didactic competence

Please send your application, quoting the job **reference number** and including the usual documents (in particular, letter of motivation, latest CV, copies of your Bachelor's and Master's certificates, official copies of your academic transcripts, list of publications, and names and contact details of at least 2 referees whose letters should be available by the deadline of this call), preferably in English, only by e-mail as one file in PDF format to Prof. Dr. Begüm Demir, at **jobs@rsim.tu-berlin.de**.

By submitting your application via email you consent to having your data electronically processed and saved. Please note that we do not provide a guarantee for the protection of your personal data when submitted as unprotected file. Please find our data protection notice acc. DSGVO (General Data Protection Regulation) at the TU staff department homepage: https://www.abt2-t.tu-berlin.de/menue/themen_a_z/datenschutzerklaerung/ or quick access 214041.

To ensure equal opportunities between women and men, applications by women with the required qualifications are explicitly desired. Qualified individuals with disabilities will be favored. The TU Berlin values the diversity of its members and is committed to the goals of equal opportunities. Applications from people of all nationalities and with a migration background are very welcome.

Technische Universität Berlin - Die Präsidentin - Fakultät IV, Institut für Technische Informatik und Mikroelektronik, FG Remote Sensing Image Analysis, Frau Prof. Dr. Begüm Demir, Sekr. EN 5, Einsteinufer 17, 10587 Berlin

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

