



Technische Universität Berlin offers an open position:

Research Associate (PostDoc) - salary grade 14 TV-L Berliner Hochschulen - For qualification

part-time employment may be possible

Faculty IV - BIFOLD / Remote Sensing Image Analysis

Reference number: IV-620/24 (starting at the earliest possible / for 4 years / closing date for applications 20/12/24)

Working field:

In recent years, foundation models have significantly advanced deep learning, especially in natural language processing, by capturing semantic relationships that improve performance across various domains. In remote sensing, foundation models offer a promising approach to handle the diverse data types resulting from different sensors, cloud coverage, or regional variations. However, applying foundation models to remote sensing data presents challenges due to the distinct characteristics of satellite/aerial images, such as sensor-specific variations and the complexity of captured scenes. At the Big Data Analytics for Earth Observation group (rsim.berlin) of BIFOLD, we are seeking to hire a Research Associate (Postdoctoral Researcher) interested in foundation models to the remote sensing domain. The research topics include (but are not limited to):

- Remote sensing specific adaptation of foundation models;
- Parameter-efficient finetuning of foundation models for remote sensing data;
- Model distillation of foundation models;
- Continual learning in foundation models.

The employment relationship is related to the regular teaching obligation (§ 5 para. 1 no. 6 LVVO Berlin). Participation in the AI Competence Centre BIFOLD requires a special aptitude for working in research.

Requirements:

- Successfully completed a doctorate (PhD) with a focus on data management, scalable data analysis, machine learning.
- Scientific experience (as demonstrated via relevant scientific publications and solid knowledge in theoretical and applied/practical computer science).
- Excellent programming skills in Python and solid knowledge of common machine learning frameworks such as PyTorch or TensorFlow.
- Strong communication skills in English.
- The ability to teach in German and/or in English is required; willingness to acquire the respective missing language skills.

Please send your **written** application with the usual documents (in particular CV and scans of university certificates) by email to 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/>

