



Technische Universität Berlin



Technische Universität Berlin offers an open position:

Research Assistant - salary grade E13 TV-L Berliner Hochschulen

under the reserve that funds are granted

part-time employment may be possible

Faculty VI - Institute of Landscape Architecture and Environmental Planning / Geoinformation in Environmental Planning

Reference number: VI-180/25 (starting at the earliest possible / limited until 30/09/2027 / closing date for applications 25/05/25)

Working field:

Project description:

The KI-Recover project aims to enhance the development and application of methods for predicting the success of reforestation measures and natural regeneration, taking into account climatic changes and extreme weather events. Remote sensing data obtained by high-resolution satellites, UAVs and drone technologies will be integrated into the modelling of growth processes and mortality using AI models. The aim is to obtain detailed information on the composition of tree species, regeneration and the climatic adaptability of forests. Our approach aims to monitor and model reforestation and succession processes using advanced remote sensing and artificial intelligence (AI). By using state-of-the-art sensor technologies, such as LiDAR, multispectral, hyperspectral and thermal infrared sensors, as well as innovative deep learning models, a more precise recording of forest regeneration after disturbances is made possible. These technologies provide a detailed analysis of structural and biophysical changes in forest ecosystems, which are crucial for the optimisation of reforestation strategies.

Job description:

We are looking for highly motivated candidates with above-average qualifications, enthusiasm for and experience in research and a willingness to actively work on collaborative projects. The Geoinformation for Environmental Planning Lab at the Technische Universität Berlin is therefore offering a position for a Scientific Assistant in the field of remote sensing in forest ecosystems. The aims of this position within the KI-Recover research project are:

- The development of a list of parameters that are useful for monitoring regeneration conditions and can be recorded by remote sensing
- Willingness to work in the field and carry out drone flights over the research areas
- Analyzing and integrating various sensor data (LiDAR, multispectral, hyperspectral, thermal infrared).
- Development and implementation of tests to simulate spatial resolutions and their influence on the recognizability of forest parameters.
- Collaboration with interdisciplinary project teams, with experts from the fields of remote sensing, AI and modelling.
- Verification of the transferability of the method to other areas

Requirements:

- Successfully completed university degree (Master, Diplom or equivalent) in relevant discipline, preferably Environmental Sciences, Geo-Ecology, Physical Geography, or a related field with a strong link to remote sensing
- Strong experiences in remote sensing image analysis
- Good programming (R, Python) and machine learning skills
- Good knowledge of German and/or English required; willingness to acquire the respective missing language skills

Desirable:

- Experience and enjoyment of fieldwork in forest ecosystems is essential for this position
- To be enthused about the prospect of working in a collaborative team
- A car driver's and drone flight license are an advantage for this position

Please send your application **with the reference number** and the usual documents **only by email** (combined in a single pdf file; max 5 MB) to Dr. Christine Wallis via **sekretariat@geoinformation.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/.

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 VI, Institut für Landschaftsarchitektur und Umweltplanung, FG
Geoinformation in der Umweltplanung, Dr. Christine Wallis, Sekr. EB 5, Straße des 17. Juni 145, 10623 Be

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

