



Technische Universität Berlin



Technische Universität Berlin offers an open position:

Research Assistant - 0.75 working time - salary grade E 13 TV-L Berliner Hochschulen

under the reserve that funds are granted

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

Reference number: VI-58/21 (starting at the earliest possible / limited for 15 months / closing date for applications 26/02/21)

Working field: The BioS project is a TU Berlin-funded project to promote the global Sustainable Development Goals (SDGs). In cooperation with the Alfred Wegener Institute Helmholtz Centre for Polar and Marine Research in Potsdam (AWI), the TU Berlin's Department of Geoinformation in Environmental Planning will use drone- and satellite-based data to analyse how a functioning carbon sink and a biodiversity hotspot in the Arctic can be monitored using innovative remote sensing methods in order to preserve them in the long term. In addition, it will be analysed whether areas of the Arctic that particularly require protection and at the same time intensely dynamic forest areas can be identified using innovative remote sensing techniques and ecosystem modelling in order to designate them as potential protected areas.

The task of the TU Berlin within the project is to derive a selection of so-called Essential Biodiversity/Climate Variables (e.g. the leaf area index) from drone data and satellite data and to integrate these data into the modelling of vegetation development (which is carried out at the AWI). Depending on the situation and funding possibilities, this may also include participation in a field trip to the study area in Siberia in summer 2021.

The position advertised here will be closely related to Arctic vegetation research and remote sensing data analysis. The candidate will benefit from the lively and interdisciplinary environment in the combination of the university and the research institution. She/he will publish her/his scientific findings in interdisciplinary context of biodiversity research, remote sensing and modelling.

The main tasks and contributions within the work at BioS include:

- Acquisition and processing of various remote sensing data (especially hyperspectral and LiDAR) at different spatial scales (drone and satellite).
- Development of algorithms for transferable monitoring of Essential Biodiversity/Climate Variables in the study region.

Requirements:

- Successfully completed university degree (Master, Diplom or equivalent) in Geoecology, Geography, Environmental Sciences, Environmental Planning, Geosciences, or a related field with a strong focus on remote sensing
- Strong knowledge in image processing (optical, especially hyperspectral, LiDAR)
- Demonstrated programming skills for implementing relevant methods and techniques in R and/or Python - Knowledge of AI methods and experience in developing open source code is desirable
- Strong interest in fieldwork and experience in flying drones would be an advantage
- Interest in scientific work and the international publication of the project results
- For the presentation and publication of the results at international conferences and in international journals a very good command of English, both written and spoken, is required
- Good command of German required or the willingness to learn German is expected

The application should include the following documents:

- CV including relevant professional experience and knowledge.
- Copies of the certificates of previous degrees (Bachelor, Master).
- Brief motivation letter why you want to conduct research, about your academic interests and how they relate to your previous research and future goals; max. 2 pages long.

Please send your written application with the **reference number** and the documents **only by email to Prof. Dr. Birgit Kleinschmit (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 guaranty 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.

Technische Universität Berlin - Der Präsident - Fakultät VI, FG Geoinformation in der Umweltplanung, Prof. Dr. Birgit Kleinschmit, Sekr. EB 5, Straße des 17. Juni 135, 10623 Berlin

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

