Faculty of Environmental Sciences

At the **Department of Geosciences, Institute of Geography** the **Chair of Computational Landscape Ecology** offers, subject to resources being available, a position as

Research Associate

(subject to personal qualification employees are remunerated according to salary group E 13 TV-L)

starting **as soon as possible**. The position is limited to three years. The period of employment is governed by the Fixed Term Research Contracts Act (Wissenschaftszeitvertragsgesetz-WissZeitVG). Balancing family and career is an important issue. The post is generally suitable for candidates seeking part-time employment. Please tell us in your application.

The position is part of the interdisciplinary research project BESTMAP – Behavioural, Ecological and Socio-economic Tools for Modelling Agricultural Policy (September 2019 - August 2023, www.bestmap.eu), funded by the EU Research and Innovation programme (Horizon 2020). In BESTMAP, 13 research institutions and companies from seven European countries work closely together to assess the impact of agricultural policy changes on the environment (biodiversity, ecosystem services), climate and socio-economic metrics in Europe using modern modelling approaches.

Tasks: independent research activities aiming at the selection, adaptation, implementation and analysis of appropriate statistical and/or biophysical models to assess the impacts of agri-environmental-climate measures on biodiversity and selected ecosystem functions; close cooperation with international project partners (especially University of Leeds) to transfer the models to different agricultural case study regions in Europe; development of methods to assess and visualise trade-offs and synergies between biodiversity, ecosystem functions and socio-economic characteristics; presentation of the results at international conferences and publication in scientific journals; preparation of and participation in project meetings and workshops; writing of project reports.

Requirements: very good university degree (master's, diploma; preferably with doctorate) in environmental sciences, landscape ecology, geography or related fields with a focus on ecological or ecosystem modelling; very good knowledge in the analysis of geodata (preferably in R and/or Python); experience and strong interest in inter- and transdisciplinary environmental research; publication record in international journals; above-average organisational and communication skills; a penchant for working closely together with international project partners; fluency in spoken and written English (German language skills are not required, but helpful).

Applications from women are particularly welcome. The same applies to people with disabilities. Please submit your detailed application (incl. letter of motivation, curriculum vitae, certificates and your Master/Diploma/PhD thesis) with the reference "Wiss_BESTMAP" by **14.04.2020** (stamped arrival date of the university central mail service applies) preferably via the TU Dresden SecureMail Portal https://securemail.tu-dresden.de/ by sending it as a single PDF document to **anna.cord@tu-dresden.de** or by mail to: **TU Dresden, Fakultät Umweltwissenschaften, Fachrichtung Geowissenschaften, Institut für Geographie, Professur für Modellbasierte Landschaftsökologie, Frau Prof. Dr. Anna Cord, Helmholtzstr. 10, 01069 Dresden**. Please submit copies only, as your application will not be returned to you. Expenses incurred in attending interviews cannot be reimbursed. The interviews are expected to take place between 22.04.2020 and 24.04.2020.

Reference to data protection: Your data protection rights, the purpose for which your data will be processed, as well as further information about data protection is available to you on the website: https://tu-dresden.de/karriere/datenschutzhinweis

Faculty of Environmental Sciences

At the **Department of Geosciences, Institute of Geography** the **Chair of Computational Landscape Ecology** offers a position as

Research Associate / PhD student / Postdoc

(Subject to personal qualification employees are remunerated according to salary group E 13 TV-L)

starting **as soon as possible**. The position is limited to three years. The period of employment is governed by the Fixed Term Research Contracts Act (Wissenschaftszeitvertragsgesetz – WissZeitVG). The position aims at obtaining further academic qualification (e.g. PhD / habilitation thesis). Balancing family and career is an important issue. The post is generally suitable for candidates seeking part-time employment. Please tell us in your application.

The Chair of Computational Landscape Ecology investigates the effects of changes in land use and landscape structure on biodiversity, ecosystem functions and services. For this purpose, we combine a wide range of methods such as field studies, ecological and biogeographical modelling, remote sensing, applied (geo)statistics and Machine/Deep Learning. Our research aims at a better understanding and improved modelling of basic relationships between landscape patterns and processes, but is also closely related to applied questions of resource management and nature conservation. We are looking forward to new colleagues who would like to contribute their own ideas and initiatives to research and teaching and who enjoy working in an open-minded, international and creative team.

Tasks: independent pursuit of own research interests on the interrelations between biodiversity and ecosystem functions, especially in agroecosystems; organisation and implementation of field work (mostly in Saxony) and scientific analysis of the results; scientific (further) development of landscape ecological models; cooperation within the TU Dresden as well as with national (especially Helmholtz Centre for Environmental Research - UFZ) and international cooperation partners; presentation of research results at international conferences and publication in scientific journals; teaching in the geographical study programmes of the Faculty of Environmental Sciences, i.e. design and teaching of seminars as well as supervision of student research projects and theses on one's own research topics.

Requirements: very good university degree (master, diploma); if applicable PhD in landscape ecology, geography, environmental sciences, agroecology, biology, systems science or related fields; very good knowledge of statistical analysis of ecological data, preferably using the programming languages R and/or Python; very good knowledge of landscape ecological modelling, evaluation of model results and scientific documentation of models; experience in and great interest in inter- and transdisciplinary environmental research; fluent English, both spoken and written (German language skills are not required); independent, structured working style, ability to work in a team, and analytical thinking; driving license class B; experience in and willingness to conduct field work.

Applications from women are particularly welcome. The same applies to people with disabilities. Please submit your detailed application (incl. letter of motivation comprising a short description of the planned research project, i.e. PhD or habilitation, curriculum vitae, certificates and your Master/Diploma/PhD thesis) with the reference "Researcher_Modelling" by **14.04.2020** (stamped arrival date of the university central mail service applies), preferably via the TU Dresden SecureMail Portal (https://securemail.tu-dresden.de/) by sending it as a single PDF document to **anna.cord@tu-dresden.de** or by mail to: **TU Dresden, Fakultät Umweltwissenschaften,**

Fachrichtung Geowissenschaften, Institut für Geographie, Professur für Modellbasierte Landschaftsökologie, Frau Prof. Dr. Anna Cord, Helmholtzstr. 10, 01069 Dresden. Please submit copies only, as your application will not be returned to you. Expenses incurred in attending interviews cannot be reimbursed. The interviews are expected to take place between 22.04.2020 and 24.04.2020.

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Tasks: independent pursuit of own research interests on the application of Data Science/Artificial Intelligence to questions of landscape ecology and Earth System Sciences; support in the instrumentation of biodiversity monitoring sites by means of acoustic sensors and/or cameras and development of methods for automated data evaluation; collaboration within the TU Dresden as well as with national (esp. Helmholtz Centre for Environmental Research – UFZ) and international cooperation partners; presentation of research results at international conferences and publication in scientific journals; teaching in the geographical study programmes of the Faculty of Environmental Sciences, i.e. design and teaching of seminars as well as supervision of student research projects and theses on one's own research topics.

Requirements: very good university degree (master, diploma) and if applicable PhD in Data Science, geoinformatics, environmental engineering or related fields, ideally in combination with a basic education in environmental science or geography; very good knowledge in the field of Machine/Deep Learning (esp. pattern analysis and pattern recognition); good knowledge in the script-based use of computational clusters for scientific computing; a penchant for interdisciplinary and applied environmental research; fluent English, both spoken and written (German language skills are not required); independent, structured working style, ability to work in a team, and analytical thinking; driving license class B.

Applications from women are particularly welcome. The same applies to people with disabilities. Please submit your detailed application (incl. letter of motivation comprising a short description of the planned research project, i.e. PhD or habilitation, curriculum vitae, certificates and your Master/Diploma/PhD thesis) with the reference "Researcher_DataScience" by **14.04.2020** (stamped arrival date of the university central mail service applies), preferably via the TU Dresden SecureMail Portal (https://securemail.tu-dresden.de/) by sending it as a single PDF document to **anna.cord@tu-dresden.de** or by mail to: **TU Dresden, Fakultät Umweltwissenschaften, Fachrichtung Geowissenschaften, Institut für Geographie, Professur für Modellbasierte**

Landschaftsökologie, Frau Prof. Dr. Anna Cord, Helmholtzstr. 10, 01069 Dresden. Please submit copies only, as your application will not be returned to you. Expenses incurred in attending interviews cannot be reimbursed. The interviews are expected to take place between 22.04.2020 and 24.04.2020.

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