Reference number 230/2020
POSTDOCTORAL RESEARCHER (M/F/D)
ON FLEXPOOL PROJECT 4: “Extracting spatiotemporal macroecological patterns using crowd-sourced plant occurrence data”

Planned for 2 years yet initially limited until 30 September 2021; extension to the entire 2 years is subject to successful renewal of DFG funding for iDiv (evaluation in spring 2021)
100% of a full-time position
Salary: Entgeltgruppe 13 TV-L
Place of work: Remote Sensing Centre for Earth System Research (Mahecha Group), Leipzig University (in collaboration with the MPI for Biogeochemistry (Wäldchen Group), TU Ilmenau (Mäder Group) and UFZ Halle (Kühn Group))

Leipzig University seeks to fill the above position at the German Centre for Integrative Biodiversity Research (iDiv) at the earliest possible opportunity.

Background

iDiv, the German Centre for Integrative Biodiversity Research Halle-Jena-Leipzig, invites applications for six postdoctoral researcher positions in its 5th Flexpool call beginning in autumn 2020 (see overview in published Flexpool general announcement).

Today, deep learning algorithms are able to classify plant species from images to a high degree of accuracy. Smartphone applications can leverage this technology and enable users to identify plant species in the field. The idea of this project interprets crowd-sourced data of this kind from a macroecological point of view. Specifically, this project will use data collected by the mobile plant identification app “Flora Incognita” and interpret them with non-linear dimensionality reduction and advanced machine learning tools. We aim to quantify spatial gradients and understand the imprint of environmental change. The project is a unique chance to participate in the forefront of the digital revolution of field ecology and work at the interface to applied computer sciences.

Tasks
- Analysis of high-dimensional ecological and environmental data using novel explorative and predictive methods (non-linear dimensionality reduction, Gaussian processes, deep learning, etc.)
- Pursuing the project independently in collaboration with four partner institutions
- Writing and publishing scientific papers in peer-reviewed journals
- Presenting results at national and international conferences

Requirements
- PhD or equivalent degree in a project-related field (e.g. quantitative ecology, computer sciences)
- Expertise and experience in data-driven research (e.g. multivariate statistics, machine learning, or multivariate time-series analysis)
- Interest and ability in working in a highly interdisciplinary setting
- Fluency in one of the common languages for scientific computing (R, Julia, or Python)
- Excellent English communication skills (spoken and written)
- Team-oriented and strong organisational skills

Please send your application, quoting reference number 230/2020, via our application portal at https://apply.idiv.de. While we prefer applications via this portal, hard-copy applications may also be sent to:
The deadline for submissions is 10 September 2020. Selected candidates will be invited to the online joint recruitment symposium on 28 September until 29 September 2020.

All applications should include:

- Cover letter in English describing the applicant’s motivation for the project, research interests and relevant experience
- Complete curriculum vitae including names and contact details of at least two scientific references
- Digital copy of master’s certificate and PhD certificate or equivalent

Queries concerning the application process should be directed to Dr Christa Genz (christa.genz@idiv.de), for project-related questions, please contact Professor Miguel. D. Mahecha (miguel.mahecha@uni-leipzig.de). Severely disabled persons are encouraged to apply and will be given preference in the case of equal suitability. Please note that applying via email is not entirely secure under data protection law. The sender assumes full responsibility.

iDiv is committed to establishing and maintaining a diverse and inclusive community that collectively supports and implements our mission to do great science. We will welcome, recruit, develop, and advance talented staff from diverse genders and backgrounds.

Privacy information

The personal data contained within your application documents or obtained during the interview will be processed exclusively for the purposes of the selection process for the position advertised. The legal basis for such data processing is Section 11(1) of the Saxon Data Protection Implementation Act (SächsDSDG) in conjunction with the EU General Data Protection Regulation (GDPR). The controller for the application process within the meaning of the GDPR is the addressee of the application, as specified in the respective advertisement. When processing your application, your personal data will be passed on within Leipzig University to
- members of the selection committee
- the human resources management teams
- the Commissioner for Equal Opportunities
- the Disability Officers and
- if necessary, the Staff Council
as part of their organisational or statutory responsibilities.

Your personal data will be erased no later than six months after completion of the selection process. In accordance with the GDPR, subject to the relevant statutory requirements you have the following rights vis-à-vis the addressee of the application with regard to your personal data: right of access (Art. 15 GDPR); right to rectification of inaccurate personal data (Art. 16 GDPR); right to erasure (Art. 17 GDPR); right to restriction of processing (Art. 18 GDPR); and right to object to processing (Art. 21 GDPR). If you have any questions, please contact the Data Protection Officer at Leipzig University (office: Augustusplatz 10, 04109 Leipzig). You also have the right to lodge a complaint with the Saxon Commissioner for Data Protection.