

The Flora Incognita research group at the Max Planck Institute for Biogeochemistry in Jena and the Technical University of Ilmenau, Department “Data Intensive Systems and Visualisation” is looking forward to hire (as soon as possible) a

## PhD student (m/f/d)

(initially limited until October 2024, extension possible)

### Background and position description:

The Flora Incognita research group at the Max Planck Institute for Biogeochemistry in Jena and at the Technical University in Ilmenau develops methods and technologies that enable efficient, rapid and automated monitoring of biodiversity in different habitats and landscapes to track the development of ecosystems, species communities and populations and to analyze causes of change.

### Your tasks:

- Scientific activity in the field of AI-supported biodiversity research
- Possible main topics according to skills and agreement with the applicant:
  - Integration of Flora Incognita observation data into species distribution models at the level of individual species and species communities.
  - Intersection and analysis of Flora Incognita data with remote sensing data and machine learning methods
  - Vegetation and ecosystem modelling in the agricultural landscape based on plant traits and automatic plant recognition
  - Extension of automatic species recognition to further application fields and species groups (e. g. plant seedlings, fungi, lichens, mosses, herbarium material, plant diseases)
- Publications in international peer-reviewed journals
- Cooperation with nature and agricultural authorities as well as national and international research partners
- Possibility to supervise students (BSc, MSc)

### Your profile:

- Master's degree (or equivalent) in biology, ecology, botany, geocology, biodiversity research, computer science or a related field
- Excellent quantitative skills (e.g. data analysis, modelling)
- Good programming skills in a modern data science language
- Interest in working in an interdisciplinary research team in the field of biodiversity research, AI and digitalization
- Independent working style
- Very good oral and written communication skills in English and a good knowledge of German

### Our offer:

- Work in a dynamic, international and interdisciplinary environment in university town of Ilmenau, the gateway to the Thuringian Forest

- Close cooperation with computer scientists of the Department Data Intensive Systems and Visualisation at the TU Ilmenau, as well as scientists of the German Centre for Integrative Biodiversity Research (iDiv) and the University of Jena, Institute of Ecology and Evolution
- Excellent supervision
- Opportunities to build and develop scientific networks
- Flexible working hours and a family-friendly working environment

Part-time work is generally possible. The position will be evaluated and graded following the collective agreement according to TVöD Bund; the salary is 65% of a full-time position; in addition, we will provide a pension plan based on the public service (VBL). The position is initially limited until 30.09.2024. An extension until 30.09.2025 is sought subject to the allocation of funds. The place of work is Ilmenau.

The Max Planck Society (MPS) strives for gender equality and diversity. The MPS aims to increase the proportion of women in areas where they are underrepresented. Women are therefore explicitly encouraged to apply. We welcome applications from all fields. The Max Planck Society has set itself the goal of employing more severely disabled people. Applications from severely disabled persons are expressly encouraged.

**Your application:**

For more information about this position, please contact Dr. Jana Wäldchen ([jwald@bgc-jena.mpg.de](mailto:jwald@bgc-jena.mpg.de)). Are you interested? Please send us your application with cover letter (describing the motivation for a PhD position, specific research interests and relevant experience), curriculum vitae as well as names and contact information of two references summarised in a PDF file (max. 10 MB) by **December 17, 2021**, quoting the reference number **33/2021** by e-mail to [bewerbung@bgc-jena.mpg.de](mailto:bewerbung@bgc-jena.mpg.de) or to the

Max-Planck-Institut für Biogeochemie  
Personalbüro: Kennwort "Doktorand"  
Hans-Knöll-Straße 10  
07745 Jena

We kindly ask you to submit copies of your application documents only, as your documents will be destroyed in accordance with data protection regulations after completion of the application procedure.

We look forward to receiving your application!