

Helmholtz-Zentrum Dresden-Rossendorf e.V.



With cutting-edge research in the fields of ENERGY, HEALTH and MATTER, around 1,500 employees from more than 70 nations at Helmholtz-Zentrum Dresden-Rossendorf (HZDR) are committed to mastering the great challenges facing society today. The Center for Advanced Systems Understanding (CASUS) is a German-Polish research center for data-intensive digital systems research. The Department of Scientific Computing Core is looking for a Postdoc (f/m/d) Research Data Management and Data Visualization.

Postdoc (f/m/d) Research Data Management and Data Visualization

City: Dresden; Starting date (earliest): 01/05/25; Duration: 24 months;
Remuneration: TVöD-Bund; Reference number: 2025/044; Closing date: 24/03/25

Working field

- Work with existing APIs for data access from various sources and design own APIs; combine different kinds of data such as sampled field data, geo-spatial data, and simulated model data
- Design and extend data handling and data management solutions; based on this, design and implement procedures and workflows for the project
- Adapt workflow systems and High Performance Computing for automated processing, then use the results to implement the automated data and model processing in the project
- Track metadata from input data and from processing steps; storage and manage metadata in a structured way
- Feed data from model simulation back to Edaphobase together with the relevant metadata and in the way Edaphobase expects them
- Extend visualisation and interactive exploration in the Edaphobase web portal with a focus on exploring model predictions in combination with existing data
- Present results at conferences and workshops, publish joint scientific papers, representation and presentation of the project, project reporting

Requirements

- Completed university studies (PhD) in the field of Computer Science or a matching application area with a strong Computational Science focus; familiarity with Biodiversity Research, Macro-Ecology, Soil Ecology or related fields
- Relevant professional experience in the specified area
- Experience with Research Data Management in theory and practice
- Familiarity with structured data formats and schemas (JSON or similar) and metadata handling, schemas, ontologies
 - Skills in web development, scientific visualization, interactive web GUIs are a plus
- Practical experience in collaborative software development, git version control,

gitlab, or similar; experience with git-annex or Datalad are a plus

- Advanced programming skills in Python, Julia or similar and past contributions to research software projects; more programming languages or parallel programming skills are a plus
- Good English language skills in a professional context, German language skills are a plus

What we offer

- A vibrant research community in an open, diverse and international work environment
- Scientific excellence and extensive professional networking opportunities
- Salary and social benefits in accordance with the collective agreement for the public sector (TVöD-Bund) including 30 days of paid holiday leave, company pension scheme (VBL)
- We support a good work-life balance with the possibility of part-time employment, mobile working and flexible working hours
- Numerous company health management offerings
- Employee discounts with well-known providers via the platform Corporate Benefits
- An employer subsidy for the "Deutschland-Ticket Jobticket"

Application

We look forward to receiving your application documents (including cover letter, CV, diplomas/transcripts, etc.), which you can submit via our online-application-system: <https://www.hzdr.de/db/Cms?pNid=490&pOid=74300&pContLang=en>

More information at <https://stellenticket.de/192107/LUH/>

Offer visible until 22/03/25

