

**Are you looking for a new professional challenge?
Then this is the place to be!
Become part of our international team!**



March 28th 2024

The Zuse Institute Berlin (ZIB) is a non-university research institute under public law of the state of Berlin. We conduct research and development in applied mathematics and computer science as well as the analysis and processing of complex data in conjunction with high-performance computing.

For the *Bioinformatics in Medicine* research group, which is part of the department *Visual and data-centric computing*, we offer a fixed-term contract at the next possible date until 30 November 2024 for an

**Scientific Employee (f/m/d)
either as research or software engineer
Reference Code IWA 14/24
Pay Grade TV-L E13 (100 %).**

The Project

The BMWK-funded consortium "Data- and AI-supported early warning system" (DAKI-FWS) aims to produce an early warning system based on various data sources and leveraging novel methods (including artificial intelligence), which will strengthen economic resilience in Germany. The planned early warning system will integrate key data sources, allowing different sectors to use the system to mitigate the impacts of hazards. The potential applications of such an early warning system are enormous. One of the main goals is to develop a generic model (including a data and analysis platform) to manage hazards such as epidemics/pandemics, floods, windstorms, and heat waves. This will allow using the early warning system in different sectors and can provide insight into hazard-related processes and impacts (e.g., seasonal effects on agriculture and any resulting long-term damage).

Your Tasks

- Collaboration with the project partners to facilitate a workflow-based data-driven research
- Application of knowledge of relevant research domains along with expert coding skills to develop industrial-grade solutions (POC, MVP, fully deployed solution) and products (platforms and frameworks)
- Development and implementation of the technical infrastructure needed to realize and integrate services for the project partners and future users as well as of workflows for data handling, integration, processing and analysis, with a focus on machine learning
- Reporting and presentation of development work clearly and efficiently, both verbally and in writing

Your Profile

- Master's degree in Computer Science or a related field
- Involvement in open-source software development, particularly in Python
- Hands-on familiarity with preprocessing and preparation of multimodal data (images, signals and text)
- Expertise in state-of-the-art deep learning topics, in particular in deep unsupervised, unpaired, self-supervised learning, as well as in generative models and Transformers
- Acquaintance with distributed systems and High-Performance Computing (HPC) would be a plus
- Excellent communication skills, both written and spoken, and a working proficiency in English
- Strong team player who has an affinity for research and a focus on practical application
- Methodical and conceptual strength, creativity, and a commitment to seeing projects through to their practical implementation

We are offering a friendly working atmosphere with flexible work and meeting times, excellent equipment and a challenging professional environment

as well as

- comprehensive training in a competent and cooperative team,
- an additional pension scheme (VBL),
- 30 days annual leave, additionally free from work on December 24th and 31st,
- compatibility of work and family through flexible working hours, e.g. (flexitime),
- a salary in accordance with TV-L (Collective Agreement for the Public Service of the Federal States), taking into account the relevant professional experience,
- an allowance of up to €150 per month, alternatively a discounted BVG (public transport) ticket + difference amount,
- an end-of-year bonus
- and the use of canteens and sports programs of the Freie Universität Berlin (FUB) at reduced rates.

Although this position advertised is full-time, a part-time agreement is also possible.

Female applicants are highly encouraged to apply. Since women are underrepresented in information technology, the ZIB is trying to increase the proportion of women in this research area.

Applicants with disabilities will be given preference if equally qualified.

Please send your application, quoting the reference code **IWA 14/24**, including a cover letter containing a statement of your research interests, your CV and the standard supporting documents as **one PDF file** by April 3rd 2024 (date of receipt) to: jobs@zib.de.

Our private policy statement regarding application data is available at www.zib.de/impressum.

For further information on the area of responsibility, please contact PD Dr. Tim Conrad (conrad@zib.de).

For further job offers please visit our website at <https://www.zib.de/jobadvertisement>.