

## Job advertisement No. 39/2021

As the German National Library of Science and Technology our future-oriented services ensure the infrastructural requirements for a high-quality supply of information and literature for research in science and industry. Our services as a university library secure the local supply for the Leibniz University Hannover.

The [Technische Informationsbibliothek \(TIB\)](#) – Leibniz Information Centre for Science and Technology – Program Area C, Research and Development, is looking to employ a

### Research Associate/PhD Candidate (m/f/d)

to join the [Learning and Skills Analytics Research Group](#) (Dr. Gábor Kismihók) at the earliest possible opportunity.

The position is initially limited to three years with envisioned extension. The working time is 75 % of the regular weekly working time (part-time, 29.85 weekly hours). The remuneration is based on [pay scale group 13 TV-L](#).

#### Your challenge

The objective of this interdisciplinary PhD project is to conduct applied research on open, Artificial Intelligence driven, personalised learning processes and individual skill development. The successful candidate will be a member of the international team working on a "[Personalized, Open Educational Resource \(OER\) Recommender for Continuous Skill Improvement](#)" project with a special focus on medical (care-taking) professions. This role includes (but is not limited to) front-end and back-end development (fullstack); developing AI driven methods for skill assessment; visualising personalized learning paths and skill requirements.

The PhD programme is also closely linked to the project "Implementation of an Adaptive Continuing Education Support System in the Professional Field of Nursing" (ADAPT) funded by the German Federal Ministry of Education and Research (BMBF) as part of the innovation competition "[INVITE](#)", which the TIB will carry out in cooperation with the Westphalian University of Applied Sciences Gelsenkirchen, Bocholt, Recklinghausen, among others. ADAPT will further develop existing in-house training platforms in the field of nursing into a digital training support system and integrate AI-supported adaptive teaching and learning concepts. The TIB will focus on the technical realisation and implementation of the AI-based continuing education system.

#### Furthermore, as a PhD student, the successful candidate will need to

- Co-design and conduct empirical studies together with partner organizations
- Publish and present research results in peer-reviewed research journals and conferences

#### Your qualities

Your competence area should be rooted in the area of Technology Enhanced Learning or a related field (computer science and data science). You should be able to think creatively, have solid academic writing skills, grasp new knowledge quickly, be able to combine abstract reasoning with concrete problem solving skills and be interested in tackling complex challenges.

#### The following qualifications are mandatory

- University degree (Master or equivalent) preferably in Data Science (or related fields)
- Excellent command of both written and spoken German and English

- Proficiency in the following technologies:
  - Django (Python)
  - Restful APIs
  - HTML5 and CSS3
  - React (JavaScript)
  - Version control systems (Git)
  - DevOps
- Well-developed analytical skills, creativity, precision and perseverance
- Ability to work both in a team and independently
- Willingness to go on business trips

#### Desired additions to your profile

- Experience in designing and implementing knowledge assessment services
- Experience in physiological user data
- Expertise in, knowledge of and interest to social science educational science or psychology

#### What we offer

In [TIB's Research and Development Department](#), you have the opportunity to further your scientific development in a dynamic and excellent research environment. We provide a scientifically and intellectually inspiring environment with an entrepreneurial mindset embedded in a [leading technical university](#) and one of the largest technical information centres being part of the [Leibniz Association](#).

The research department at the TIB is relatively young and offers many opportunities. There is a close cooperation with the [L3S Research Centre](#) at Leibniz University Hannover, one of the world's leading research institutes in the field of Web & Data Science, within the Leibniz [Joint Lab](#) Data Science & Open Knowledge.

Last but not least, we attach great importance to an open and creative working atmosphere in which it is fun to work.

#### Furthermore, we offer

- Financing for necessary equipment, conference and research visit travel
- Work in the context of a national research and innovation project
- A portfolio of technology components to build on, including [ORKG](#), [OpenResearch.org](#), [TIB AV-Portal](#), [DBpedia.org](#) and other
- A modern workplace in a central location of Hanover with a collegial, attractive and versatile working environment
- Flexible working hours (flexitime) as well as [offers for reconciling work and family life](#) such as mobile work and remote work options
- An employer with a wide range of internal and external further education and training measures, workplace health promotion and a supplementary pension scheme for the public sector ([VBL](#))
- Discount for employees in the canteens of the [Studentenwerk Hannover](#) as well as the possibility to use the various offers of the [University Sports Hannover](#)
- A job in the public service with a salary in [pay scale group 13 TV-L](#) according to the provisions of the collective agreement for the public service in Germany (TV-L), including a special annual payment

If you are interested, questions regarding the position can be addressed to Dr. Gábor Kismihók, head of Learning and Skill Analytics Group, by mail at [Gabor.Kismihok@tib.eu](mailto:Gabor.Kismihok@tib.eu).

### How to apply

We look forward to receiving your application. To submit your application, please click [here](#).

Paper applications are also possible on an equal basis. In this case, please send your complete application documents with the subject **39/2021** before **July 6, 2021** addressed to

Technische Informationsbibliothek (TIB)  
Personalservice  
Herrn Daniel Eilers  
Welfengarten 1 B  
30167 Hannover  
Germany

or alternatively as a single PDF document file to [Bewerbung@tib.eu](mailto:Bewerbung@tib.eu). For applications in digital form, please send a PDF file with a maximum size of 10 MB.

### The application should include:

- Professional CV
- Two reference contacts
- Copy of diplomas or certificates
- Copy of Master Thesis or other evidence of skills in data science or statistics
- Copies of Publications (if available) or other evidence of academic English writing ability

### Who we are

TIB, being part of the Leibniz Research Association, is with around 550 employees one of the largest technical information centres in Germany, having three main functions:

1. Acting in the capacity of the Leibniz Information Centre for Science and Technology, our forward-looking services secure the infrastructural requirements for providing researchers in science and industry with high-quality information and literature.
2. Carrying out cutting edge research to further expand TIB's role as a German information centre for the digitisation of science and technology.
3. Offer library services for the Leibniz University Hannover.

TIB is an equal opportunity employer, providing ideal working conditions, and continuously taking action to enable its employees to combine career interests with family life.

Severely disabled candidates with comparable qualifications will be given preferential treatment. We welcome applications from all nationalities.

Please note that your application documents will not be returned and application and travel costs cannot be reimbursed.

Please indicate in the subject line of your application through which job board you became aware of our offer.

For more information about the TIB, please visit: [www.tib.eu/en/](http://www.tib.eu/en/)