15.06.2020

Job advertisement No. 24/2020

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 Leibniz Information Centre for Science and Technology - Technische Informationsbibliothek (TIB) - Program Area C, Research and Development, is looking to employ two

Software engineers / CKAN developers (m/f/d)

to work in Research Group Scientific Data Management and Research Data Services, respectively, at the next possible date.

Both positions are initially limited to 2 years. The regular weekly working time is 39.8 hours (full-time). Both positions are only suitable for part-time work to a limited extent. The remuneration is based on pay scale group 13 TV-L.

Your challenge

The two positions are part of the third-party funded project "Leibniz Data Manager - A tool to search and explore digital artefacts across different repositories and evaluate their potential for re-use (LDM-Explore)" funded by the German Research Foundation (DFG).

The LDM-Explore project will provide a software tool which can aid in the transition from a publication- or article-based to an information-based (linked-data) research workflow. This will happen by further developing a CKAN-based software distribution that allows for a method which is called 'deep indexing' of metadata and data across digital repositories, using the existing semantic tools like DCAT to map metadata standards to semantic vocabularies. The functionality of the software will then be demonstrated by connecting three pilot repositories.

Your tasks include

- Semantically connecting existing data catalogues and repositories, based on the extendable and adaptable DCAT vocabulary framework
- Increase interoperability and data exchange between scientific data repositories considering the variation in terms of data and metadata standards, APIs, file formats, licence information, archival- and publication guidelines and terms of re-use
- Develop the CKAN-based LDM prototype into a small-scale and open software distribution which can connect digital repositories and provides an integrated view of the data sets archived by these repositories
- Participation in the preparation of applications for third-party funding

Your qualities

Your competence area should be squarely rooted in software engineering, CKAN development or related fields. You should be able to think creatively, grasp new knowledge quickly, be able to design and develop innovative software systems and be interested in mastering complex challenges.

- Successfully completed university degree (Master's degree or equivalent) in a relevant field of study such as Computer Science, Information Science, Mathematics or comparable
- Excellent proficiency in Semantic Technologies and CKAN-based repository systems
- Proficiency in modern programming languages (esp. Java, JavaScript, Python, PHP) and modern software engineering methodologies (esp. Agile methods, DevOps)
- Experience in data mining, machine learning, algorithms, pattern recognition, information retrieval and ontologies (Protégé) as well as analysis tools
- Experience in the development and use of web services (REST, SOAP)
- A high degree of self-organisation and working independently
- Proficiency in spoken and written English; Proficiency in German is a plus

Desirable

- Knowledge of Research Data Management
- Experience in DCAT vocabularies
- Project management skills

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. It is our vision to rethink the representation and provision of data and information and to organize them in an Open Research Knowledge Graphs ([ORKG]()) in the future. 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

- Funding for necessary equipment, conference and research visit travel
- Candidates will work in the context of a national, European or international research and innovation project
- A portfolio of technology components to build on, including [LDM](), [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
- Comprehensive and intensive training in an interesting and varied field of activity
- Flexible working hours (flexitime) as well as [offers for reconciling work and family life](), such as mobile work
- 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 salary in [pay scale group 13 TV-L](#) according to the provisions of the collective agreement for the public service in Germany (TV-L)

If you are interested, questions regarding the position can be addressed to Prof. Dr. (**Univ. Simón Bolívar**) Maria-Esther Vidal (maria.vidal@tib.eu) and Dr. Angelina Kraft (Angelina.Kraft@tib.eu).

How to apply

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 **24/2020** before **July 27, 2020** 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. For applications in digital from, please send a PDF file with a maximum size of 10 MB

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.

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

For more information about the TIB, please visit: www.tib.eu/en/

We look forward to receiving your application!