

Our team is looking for a

Staff Data Scientist/Steward or Software Developer (f/m/d) to facilitate the development of ProteomicsDB

with a good background in bioinformatics, data visualization, big data analytics at best in the context of mass spectrometry.



ProteomicsDB (<https://www.proteomicsdb.org/>) is an internationally well-reputed publicly available database that provides information about proteins and other bio-molecules initially centered around human biology. It is designed to integrate data from mass spectrometry-based experiments and other sources to offer a comprehensive view of proteomes. We (<https://www.mls.ls.tum.de/en/compms/home/>) are continuously expanding the types of data stored in as well as the number of organisms covered. Researchers and scientists can use ProteomicsDB to explore and analyze protein-related data for a better understanding of cellular processes, functions, and disease mechanisms. ProteomicsDB is built on the in-memory system SAP HANA using IBM Power 8/9 hardware.

The successful candidate will become a key member of a strong interdisciplinary team of bioinformatician that focus on the development and application of novel approaches in proteomic research. Specifically, the successful applicant will assist the recently funded NHPig (<https://www.nhpig.eu/>) project, an EU-funded research project aimed at transforming non-clinical safety assessment by use of mini- and micropig models. Depending on the applicant's skills, this position will strengthen our ongoing development of ProteomicsDB focusing on the backend or frontend development in combination with data management. In light of this, the most important aspects of the job description are:

- Service engineering and infrastructure maintenance for ProteomicsDB
- Full-stack development to enhance ProteomicsDB
- Data import, maintenance, and integration of e.g. proteomics, lipidomics, or metabolomics data

Requirements: Candidates must hold a master's degree in Data Engineering, Data Science, Bioinformatics, Informatics, or a related discipline. Essential skills include a sound understanding of Linux and related systems, software development standards, and hardware management. Additional beneficial skills include a theoretical knowledge of and practical skills in statistical analysis, data integration, backend or frontend programming and database design. Interest in understanding technologies e.g. proteomics and metabolomics using mass spectrometers is expected. We are looking for a self-motivated and broadly interested individual with high potential and a strong sense of responsibility.

Flexibility and the ability to work in a fast-paced environment on multiple scientific and infrastructure projects are essential. Good inter-cultural and inter-personal communication skills as well as the ability to present in English are also important.

Our offer: You will join a young and highly motivated team of interdisciplinary bioinformaticians that use the latest proteomic approaches to gain insight into the biological processes that govern life. You will further be connected to the Munich Data Science Institute (MDSI; <https://www.mdsi.tum.de/mdsi>) at the Technical University of Munich (TUM) to foster and facilitate exchange. You will also be connected to the SAP University Competence Center (UCC; <https://ucc.tum.de/>) at the TUM to assist in the hardware/software maintenance of ProteomicsDB, with the option to receive a proof of work with SAP HANA. TUM is one of the best academic institutions in Germany and offers a stimulating work environment and excellent future perspectives.

The position is initially limited until December 2028 and available as soon as possible. Remuneration is in accordance with the TV-L E13 according to the professional qualification.

Equal opportunity: TUM is aiming to increase the proportion of women and, therefore, expressly welcomes applications from women. The position is also suitable for severely disabled persons. Severely disabled applicants will be given preference if their suitability, qualifications and professional performance are otherwise essentially equal.

Application: Applications should include a motivational statement (maximum one page), a curriculum vitae summarizing qualifications and experience, copies of degrees/university transcripts, names and email addresses of at least one referee. Applications should be sent as a single PDF to Prof. Dr. Mathias Wilhelm (mathias.wilhelm@tum.de).

Notes on data security: When you apply for a position with the Technical University of Munich (TUM), you are submitting personal information. With regard to personal information, please take note of the Datenschutzhinweise gemäß Art. 13 Datenschutz-Grundverordnung (DSGVO) zur Erhebung und Verarbeitung von personenbezogenen Daten im Rahmen Ihrer Bewerbung. (data protection information on collecting and processing personal data contained in your application in accordance with Art. 13 of the General Data Protection Regulation (GDPR)). By submitting your application, you confirm that you have acknowledged the above data protection information of TUM.