

We are offering a position (8-10h / week), available immediately, as a

Student Assistent / Studentische Hilfskraft (m/w/d)

We are looking for a master/bachelor student with a strong background in programming and knowledge in object-oriented programming to support the development of an end-to-end project consisting of a Bioinformatics CLI, Rest API, and WebApp. You will use current industry tools and best practices, while solving interesting bioinformatics problems in the context of our ongoing research projects. In addition to gaining experience in software engineering, you will also learn about microbiome data and bioinformatic analyses of multi-omics data. Working hours are flexible by prior arrangement.

About us

The professorship of **Translational Microbiome Data Integration** at the Technical University of Munich is located in Freising-Weihenstephan. The research of our lab focuses on the human microbiome, especially gut microbes, and investigates mechanisms of host-microbial interactions in health and disease. We are particularly interested in the role of the microbiome in inflammatory and auto-immune diseases and how hormone-microbiome interactions impact female health. To address these questions, we use bioinformatics with a focus on integrated multi-omics analyses (metagenomics, metatranscriptomics and metabolomics) combined with the subsequent isolation of the strains in the lab to further study these mechanisms.

Tasks

- Write functions to retrieve, process, and visualize data using Python
- Design and implement REST APIs using java and Spring Boot
- Design and implement a Web App using javascript and ReactJS

Requirements

- Proficient using linux and bash commands
- Good understanding of object oriented programming
- Proficient in reading and writing code in Python
- Additional experiences:
 - Experience developing REST APIs in Java and SpringBoot *is a plus*
 - Experience developing web applications with JavaScript and ReactJS *is a plus*
 - Knowledge of Docker and MongoDB *is a plus*

Contact

Technical University of Munich
Prof. Dr. Melanie Schirmer
Professorship for Translational Microbiome Data Integration
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Application

Please send your full application as a **single PDF** by **August 22nd, 2024** to sekretariat.mdi@ls.tum.de with the subject „stHi - 2024“. The application should include a cover letter, detailed CV and study transcripts. Please also indicate a preferred starting date. The position is initially limited to the duration of the current semester with the intention to extend the contract. Applications will be considered on an ongoing basis until the deadline.

Data protection information: When you apply for a position at the Technical University of Munich (TUM), you are submitting personal information. Please take note of the data protection policy according to Art. 13 Datenschutz-Grundverordnung (DSGVO) on the collection and processing of personal information as part of your application. By submitting your application, you confirm that you have acknowledged the data protection information of TUM.