Job posting

Type of position
☒ scientific
☐ administrative

Target group
☐ graduates
☒ post docs
☒ other

Title
AMMOD - Full Stack Software Developer (m-f-d)
(Full-time or part-time; limited until 31.10.2022)

Job ID 21-55

Institution
Jacobs University is a private, state-accredited, English-language research university in Bremen. We offer PreDegree, Bachelor’s, Master’s and PhD programs in the Focus Areas Health, Mobility and Diversity and are committed to the professional development of specialists and managers and to knowledge transfer. Guiding principles include the highest standards in research and teaching, interculturality, and cross-disciplinary collaboration. The aim is to optimally prepare talented individuals from all over the world for responsible tasks in a globalized working world. Currently, approximately 1,500 young people from over 110 nations live and learn on campus.

The Project
We are:
• An agile, cross-functional team
• Developing and operating several prediction-grade services for research data

In order to address current and future challenges in species diversity, standardized, spatially inclusive and comprehensive observation data are of paramount importance. The German Federal Ministry of Education and Research (BMBF) has funded the project AMMOD - Automated Multisensor Station for Monitoring of Species Diversity (www.ammod.de). The aim of AMMOD is to build “weather stations” for automatically monitoring species diversity. These stations will include sensors for recording animal sounds and plant emissions, wildlife cameras for birds, mammals, and insects, and automated insect and pollen sample collectors, which are used for monitoring via DNA barcoding.

Our team is responsible for data management and provisioning. A key aspect of the data flow is the automated transfer of different data types from the AMMOD stations to the dedicated, long-term data centers for archiving and publication. We have developed and deployed a cloud-based AMMOD data portal and are extending the data brokerage system, developed and operated by the German Federation for Biological Data (GFBio, www.gfbio.org). Ultimately, all software solutions should be
embedded in the National Research Data Infrastructure for Biodiversity (www.nfdi4biodiversity.org).

Responsibilities
• Customizing and extending the data flows from the AMMOD stations to the data centers.
• Designing and implementing new features of the AMMOD data portal (e.g. provisioning, validation, visualization)
• Testing, deployment and maintenance of the AMMOD software components.
• Extending and linking the workflows of the GFBio data brokerage system.
• Work on various tasks and assignments in all areas of Frontend/Backend development, either in collaboration with other team-members or independently.

Requirements
• Solid experience in software development, preferably with an object-oriented language like Python, JAVA or similar
• Experience in back-end development
• Knowledge in Web-Frameworks, preferably with the Django web-framework
• Experience in front-end development (HTML, CSS, etc.), including client-side scripting in JavaScript, e.g. ReactJS or Angular JS, is a plus.
• We will consider applicants with solid full-stack development experience in other technology stacks who are interested in learning the technologies we use.
• Basic understanding of relational database concepts and experience working with major relational database platforms such as PostgreSQL
• Experience with the following is preferable but not required:
  o Version control management with Git
  o Service containerisation with Docker, Kubernetes or similar
  o Cloud technologies, e.g. Open Stack
  o Agile software development with Scrum and CI/CD practices
• The ability to balance multiple concurrent tasks and work well with minimal supervision
• Strong problem solving and critical thinking skills
• Strong attention to detail

We offer
• The result counts: trust working hours for work-life balance
• Individual induction, promotion and development planning
• Free, extensive sports and health offers (currently under restrictions due to COVID 19)
• Green campus with recreation areas
• Jacobs University has extensive programs
• on sustainability, environmental sustainability, equal opportunities and high ethical values

If you enjoy a dynamic international working environment and like to work in a highly motivated and friendly team, you are exactly right with us! You can expect an open corporate culture with flat hierarchies as well as interesting and challenging tasks. During your induction, you will be optimally prepared for your area of responsibility.

For further information regarding this position, please contact Dr. Marc Weber, department of Life Sciences and Chemistry, via e-mail: m.weber@jacobs-university.de.

Please upload your relevant documents with details of your availability and salary expectations in the application management system on our website. In order to do so, click here to go to our website.

The review of applications will begin immediately and will continue until the position is filled.

Jacobs University offers full equality of opportunity to all qualified applications and is an equal opportunity employer.