



Conducting research for a changing society: This is what drives us at Forschungszentrum Jülich. As a member of the Helmholtz Association, we aim to tackle the grand societal challenges of our time and conduct research into the possibilities of a digitized society, a climate-friendly energy system, and a resource-efficient economy. Work together with around 7,500 employees in one of Europe's biggest research centres and help us to shape change!

Research data are the foundation of scientific discovery. Establishing the provenance of data, enabling its reusability and ensuring long-term availability increases the value, transparency and visibility of research, and opens possibilities for interdisciplinary research and large-scale AI-enabled data science approaches. The Helmholtz Metadata Collaboration - HMC; https://helmholtz-metadaten.de/en - is a platform operating across Helmholtz research centers. It develops and establishes novel concepts, services and workflows to annotate complex and heterogeneous research data with metadata throughout the various phases of acquisition and processing in support of the FAIR principles. HMC is anchored as a "Metadata Hub" within the Helmholtz research domain Information at Forschungszentrum Jülich to engage and actively involve the scientific community. The team for Data Science for Electro- and Optophysiology Behavioural Neuroscience at IAS-6 joins these efforts by developing software tools to support reproducible data acquisition, analysis and model validation in the context of EBRAINS.

#### We are looking to recruit a

## Software Engineer Ontologies for Neuroscience – Helmholtz Metadata Collaboration in the Hub Information

#### Your Job:

- Software development: Development of software and adaption of existing solutions to facilitate the automated and web-based usage of metadata and ontologies for knowledge discovery
- Information and Knowledge Engineering: (Co-)Development of domain-specific vocabularies, ontologies and metadata schemas in collaboration with colleagues across the HMC
- Organization and integration of metadata schemas within the neuroscience domain, metadata expert communities within the Helmholtz Association, and international neuroscience initiatives (e.g., EBRAINS, BIDS)

The job will be advertised until the position has been successfully filled. You should therefore submit your application as soon as possible. We look forward to receiving your application via our

#### Online-Recruitment-System!

# Questions about the vacancy?

Get in touch with us by using **our contact form.** 

Please note that for technical reasons we cannot accept applications via email. www.fz-juelich.de



- Execution of collaborative projects for implementations in the context of FAIR data principles, supported by further HMC computer scientists
- Support for the Helmholtz-wide HMC Hub Information at Forschungszentrum Jülich and in the domain of neuroscience
- Representing the HMC and the IAS-6 with their technologies at scientific seminars, conferences, during educational courses, and to the public
- Building competence networks with research software engineers as part of Helmholtz networks - e.g., HIRSE; https://www.helmholtz-hirse.de - and with data stewards within HMC and internationally

#### Your Profile:

- University degree (Master, Diploma) in natural sciences, computer science or engineering
- PhD in one of the above fields
- Proven knowledge and programming experience in at least one high-level language language (including Python)
- Experience in building web applications using common frameworks (preferably react, nextJS)
- Previous experience with Protege or similar tools for semantic modeling and web-based services for managing software (version control, issue tracking, CI, ...)
- Practical experience with research data management and metadata standards is beneficial
- Experience in neuroscience is an advantage
- Communication and teamwork skills as well as the ability to cooperate in different and very multidisciplinary teams
- Fluent in English, spoken and written
- Ability to work independently, systematically and on one's own responsibility
- Enthusiasm for a highly topical subject with great scientific and social relevance
- Willingness to travel

### Our Offer:

We work on the very latest issues that impact our society and are offering you the chance to actively help in shaping the change! We support you in your work with:

- A large research campus with green spaces, offering the best possible means for networking with colleagues and pursuing sports alongside work
- A position in a creative, dynamic and international team that conducts research at the frontiers of science, where your work will have noticeable impact on shaping the digitization of science
- World class science environment at the interface between neuroscience and digital technologies, enabling scientific progress on the most complex known systems
- Attractive work spaces at the IAS-6 at Forschungszentrum Jülich and at the "Technologiezentrum Aachen" (TZA) close to Aachen downtown for optimal cooperation with the HMC team there
- Extensive company health management
- Ideal conditions for balancing work and private life, as well as a family-friendly corporate policy
- Flexible work (location) arrangements, e.g. remote work
- Exploration and preparation of next career opportunities supported by our Career Center & Postdoc Office: https://www.fz-juelich.de/en/career-center-postdoc-office
- Targeted services for international employees, e.g. through our International Advisory Service

In addition to exciting tasks and a collaborative working atmosphere at Jülich, we have a



lot more to offer: https://go.fzj.de/benefits

The position is initially for a fixed term of 2 years, with possible long-term prospects. Salary and social security benefits will conform to the provisions of the Collective Agreement for the Public Service (TVöD-Bund), pay group 13, depending on your current qualifications and the precise nature of the tasks assigned to you. All information about the Collective Agreement for the Public Service (TVöD-Bund) can be found on the BMI website: https://go.fzj.de/bmi.tvoed. The monthly salaries in euros can be found on page 66 of the PDF download.

We particularly welcome applications from people from a diverse range of backgrounds (e.g. regardless of age, gender, disabilities, sexual orientation/identity, as well as social, ethnic, and religious background). We strive to offer a diverse and inclusive working environment in which people enjoy equal opportunities and are able to fulfill their potential.

Further information on diversity and equal opportunities: https://go.fzj.de/equality