

## Job advertisement

# Graduate research assistant to work on the project „STELLA project“ (m/w/d)

ZB MED - Information Centre for the Life Sciences ([www.zbmed.de](http://www.zbmed.de)) has announced the establishment of a

### **Graduate research assistant (m/w/d)**

to work on the DFG funded project „STELLA“ in ontology-based terminology clustering for a limited period of 1/2 year with a dedication of 19 hours per week.

As an information infrastructure, the ZB MED is the central partner for the life sciences in Germany and Europe: from medicine and biodiversity to environmental protection. The institute emerged from National Library for Life Sciences. Building on its literature holdings and accesses, databases and research data, the ZB MED supports researchers in obtaining new information and findings - both locally in Cologne and Bonn and nationally. ZB MED offers digital value-added services via the semantic-based search portal LIVIVO and the open-access publication portal PUBLISSO. A further focus is the teaching of information and data competence. ZB MED conducts its own application-oriented research using data science methods in the life sciences and aims to gain new insights and develop services for life science research. The Information Centre is a foundation under public law.

### **Expected activities**

- ▶ Development of graph embedding algorithms on biomedical ontologies defined in OWL
- ▶ Clustering approach built on top of the graph embeddings
- ▶ Generation of vector representations out of the clusters
- ▶ Report writing and outcomes presentation

### **Your professional qualifications and personal skills:**

- ▶ Good data processing skills, preferably in Python or Java
- ▶ Good skills in project management, i.e. use and delivery of data, reporting, tracking of progress
- ▶ Good knowledge of ontologies and linked data is a big advantage
- ▶ Good experience with clustering approaches
- ▶ Basic or (better) good knowledge of graph embeddings (e.g., node2vec, graph2vec, rdf2vec, owl2vec)
- ▶ Excellent language skills in English



- ▶ You should be a master or PhD student in bioinformatics, computer science, data science, computational biology or similar

Our research project is at an early stage so you should enjoy bringing ideas to the table and easily adapt to evolving requirements.

**You might also have some experience in**

- ▶ Life sciences data
- ▶ Non-SQL databases
- ▶ Graph or triple stores
- ▶ Publishing research outcomes

**We offer:**

- ▶ Cooperation in a highly motivated and international team located in Cologne
- ▶ Research projects covering methodological and practical approaches on interdisciplinary fields corresponding to the Life Sciences domain
- ▶ A varied, multifaceted field of activity
- ▶ Modern equipped workstations
- ▶ Knowledge transfer via seminars and colloquia
- ▶ A remuneration according to your qualifications

ZB MED promotes the diversity of backgrounds and skills in its employment relationships. Severely disabled persons are given preferential consideration if they are equally suitable. The application of women is expressly desired. In accordance with the Equal Opportunities Act of the State of North Rhine-Westphalia, preference is given to women with the same aptitude, qualifications and professional performance, provided that there are no overriding reasons relating to a competitor. Equal opportunities are an integral part of ZB MED's personnel and organisational development, for which the information centre has repeatedly been awarded the TOTAL E-QUALITY title.

Have we got your interest? Then you are welcome to contact Leyla Garcia ([ljgarcia@zbmed.de](mailto:ljgarcia@zbmed.de)) for further information

Applications with the relevant documents (max. 10 pages in one file including a letter of interests, CV and at least one academic recommendation, e.g., supervisor) online to [verwaltung@zbmed.de](mailto:verwaltung@zbmed.de) are requested by 19th July 2020.

**Zeichen: PB 14/20**