Research Associate (75% TV-L 13)

We are looking for several Research Associates/PhD Candidates (Wissenschaftliche(r) Mitarbeiter(in)) to work in the TIB Research Department under supervision of Prof. Dr. Sören Auer and Prof. (Univ. Simon Bolivar) Dr. Maria-Esther Vidal. Initial appointment will be for 3 years with the possibility of extension, starting as soon as possible. The candidate’s competence area should be squarely rooted in computer science or a related field, she should be able to think creatively, grasp new knowledge quickly, be able to combine abstract reasoning with concrete problem solving and be interested in mastering complex challenges.

Requirements:

- A Master degree in a relevant field (Computer Science, Mathematics, Information Science)
- Proficiency in spoken and written English. Proficiency in German is a plus.
- Excellent proficiency in modern programming languages and modern software engineering methodologies. Proven team software development skills.
- Interest in mastering and applying formal methods.
- Familiarity with Semantic Technologies, Big Data Management, Human-Computer Interaction, Natural Language Processing, Artificial Intelligence, Data Analytics, Life Sciences, or Digital Libraries is an asset.

Possible PhD topics include (but are not limited to):

- **Scientific Data Management - Semantic Data Lakes for Science** - requires demonstrated, rigorous knowledge of data management (relational databases, SQL, graph databases, XML, RDF) and good knowledge of Big Data technologies
- **Research Data Containers** - requires demonstrated, rigorous knowledge of data management and virtualization techniques (Docker)
- **Semantic Scholarly Communication (Semantic Papers)** - requires good knowledge of semantic knowledge representation
- **Semantic Scholarly Metadata management (OpenResearch)** - requires good knowledge of semantic knowledge representation
- **Exploration & Search of Scholarly Metadata (ORCHID Publishing)** - requires human-computer interaction, information visualization and retrieval expertise
- **DBpedia Knowledge Graph Management** - requires good knowledge of semantic data management technologies
- **Collaborative OpenCourseWare creation (SlideWiki.org)** - requires good human-computer interaction and frontend development skills
- **Question Answering Infrastructure (WDAqua/Qanary)** - requires excellent software architecture skills, interest in semantic technologies and natural language processing

What we offer: We provide an scientifically and intellectually inspiring environment with an entrepreneurial mindset embedded in a leading technical university and one of the largest technical information centers being part of Leibniz research association. Our aim is to provide the environment and resources to enable the candidates to successfully complete their PhD.

- PhD candidates will work in the context of a national, european or international research and innovation project.
- Funding is available for equipment, conference and research visit travel.
- A portfolio of technology components to build on, including DBpedia, BigDataEurope Platform, OntoWiki, Qanary QA, OpenResearch.org, SlideWiki, iASiS, etc.
- Qualified candidates will start in level TV-L 13 (75%) of the German public service pay-scale (approx. 1,700-2,000 Euro net monthly salary depending on experience including all German social benefits).

The positions start as soon as possible, are open until filled and will be granted initially for 3 years with envisioned extension.
**How to apply:** Please send your CV, a letter of reference and a two page motivational statement (incl. research, and technology interest) to Prof. (Uinv. Simon Bolivar) Dr. Maria-Esther Vidal ([vidal@cs.uni-bonn.de](mailto:vidal@cs.uni-bonn.de)). Please do not send emails larger than 10 MB.