

Jena University Language & Information Engineering (JULIE) Lab at Friedrich-Schiller-Universität Jena (Germany) invites applications for a 4-year fixed-term contracted, full-time researcher position (either a doctoral student or PostDoc, dependent on academic credentials) with salary based on the German pay scale TV-L 13. We seek applicants whose areas of expertise cover the broad field of

## Semantic technologies for scientific data management and text mining – with focus on NLP

This position is part of JULIE Lab's involvement in the prestigious Collaborative Research Center AquaDiva – SFB 1076; <a href="http://www.aquadiva.uni-jena.de/">http://www.aquadiva.uni-jena.de/</a>). This collaborative effort of natural and life scientists deals with geological, biological, chemical and ecological interdependencies in the biogeosphere and offers exciting opportunities for leading-edge research activities. JULIE Lab's contribution lies in harvesting relevant information from unstructured documents (publications, etc.), integrating it into structured data repositories, and making this information accessible for AquaDiva researchers. Accordingly, applicants should demonstrate expertise and research interests in the following fields:

- **Semantic Technologies:** Ontologies for the natural and life sciences; Semantic Web-oriented knowledge representation languages (such as OWL) and associated inference engines,
- Natural Language Processing & Text Analytics: Integration of ontological domain knowledge
  into text analytics pipelines for semantic search, information extraction and text mining making heavy use of machine learning techniques,
- **Data Quality**: Semantic models for managing different degrees of credibility of data (data trust), data consistency (conflicting data), and data (in)completeness,
- Data Abstraction & Data Pragmatics: Scientific discovery platforms, which include mechanisms for automatic text and data summarization, novelty detection and personalization.

Technical skills and methodological competencies equivalent with a Master's degree in computer science (informatics), data or information science, or disciplines with a strong computational backing (such as computational linguistics, bioinformatics) are required. Domain knowledge in the life or natural sciences is a valuable asset for working in the AquaDiva framework, though not a prerequisite.

Kindly send your complete application material (cover letter, CV, publications, scholar certificates) or further inquiries in electronic form only to the head of JULIE Lab, Prof. Dr. Udo Hahn (<a href="mailto:udo.hahn@uni-jena.de">udo.hahn@uni-jena.de</a>). For additional information about JULIE Lab, please, check our Web site under <a href="http://www.julielab.de">http://www.julielab.de</a>.



Severely disabled applicants with equal qualification and aptitude are given preferential consideration. When contacting us, please, quote "JULIE Lab Jobs 2017 – AquaDiva" in the subject line of your correspondence.