

# PhD and Post-Doctoral Positions for Explainable AI at University of Bamberg



*We are especially encouraging applications from researchers who are interested to make a transition from knowledge-based artificial intelligence, logic and automated reasoning, or a declarative programming into machine learning.*

## PhD Position in the DFG-funded project Dare2Del

The professorship Cognitive Systems at Otto-Friedrich-Universität Bamberg has an opening for a research assistant (m/f/d) in the DFG-funded project “Learning to Delete: Forgetting of digital objects as joint decision in human-AI-partnerships“ (Dare2Del). Dare2Del is a project within the priority program Intentional Forgetting (SPP 1921). Focus is the conceptualisation, development, and evaluation of methods for comprehensible and trustworthy machine learning, mainly based on inductive logic programming. The position is full-time and limited to three years. The salary amounts to German TV-L E13, which is roughly 47.000 to 53.000 Euro gross income per year.

### Tasks:

- Collaborate with the project supervisor in the development and application of explanation generation methods
- Implementation and evaluation of explanation methods
- Instructing student assistants
- Collaborating with the project supervisor in publications of project results

### Requirements:

- Master degree in computer science with a focus on at least one of the following areas: artificial intelligence, logic, declarative programming, machine learning
- Very good communication skills in English and the willingness to learn German
- Enthusiastic and highly motivated to complete a PhD
- Interest in cognitive science

## Post-Doc Position for Explainable Artificial Intelligence

*(preliminary, awaiting final approval)*

Fraunhofer IIS establishes a new research group with focus topic Explainable AI, headed by Prof. Dr. Ute Schmid, University of Bamberg. Goal is to develop methods for transparent and comprehensible classifiers, especially for image data from X-ray tomography and other image-based techniques for industry and medicine. Deep learning approaches as well as interpretable machine learning approaches will be further developed and applied. Furthermore, combining reasoning and machine learning will be explored with the goal to develop diagnosis systems relying on human-AI-partnerships. The position is full-time and limited to three years. Salary amounts to German TV-L E13, which is roughly 47.000 to 53.000 Euro gross income per year.

**Tasks:**

- Scientific conception, implementation and evaluation of approaches of the Explainable AI
- Technical guidance of project group members in the development of innovative
- Methods as well as the implementation of approaches
- Participation in the acquisition of projects in cooperation with the group management
- Support for PhD students of the group, in particular at publications
- Supervision of master theses
- Active development of cooperation within Fraunhofer IIS at the Fürth locations and Erlangen as well as in the group Cognitive Systems at the University of Bamberg
- Interest in cognitive science.

**Requirements:**

- Master degree in computer science
- Doctorate degree with a topic related to artificial intelligence – preferably machine learning or reasoning or declarative programming
- Very good communication skills in English and the willingness to learn German
- Interest in applications of explainable AI for industrial and medical image data

**General**

The Otto-Friedrich-Universität Bamberg is endeavouring to increase the proportion of women in research and teaching and therefore encourages appropriately qualified women to apply. Severely disabled applicants will be given preferential consideration if their other qualifications are essentially the same. The Otto-Friedrich-Universität Bamberg has been certified by the Hertie Foundation as a family-friendly university. It is particularly committed to the compatibility of family and working life. The positions may be filled part-time if the full-time performance of the tasks is ensured by job sharing.

**How to apply**

All applications shall be sent to Ute Schmid ([ute.schmid@uni-bamberg.de](mailto:ute.schmid@uni-bamberg.de)). Your application should include a motivation letter, curriculum vitae, certificates, and a list of publications (if any). Please combine your documents into a single pdf-file (max. 6MB).

**Key dates**

Applications will be accepted until the position is filled. Expected starting date is February 1, 2020.

**Contact**

Otto-Friedrich-Universität Bamberg

Prof. Dr. Ute Schmid

Professur für Angewandte Informatik, insbes. Kognitive Systeme

An der Weberei 5

96045 Bamberg

E-Mail: [ute.schmid@uni-bamberg.de](mailto:ute.schmid@uni-bamberg.de)

Homepage: <https://www.uni-bamberg.de/cogsys>