

# Otto-Friedrich-Universität Bamberg



The Chair of Natural Language Generation and Dialogue Systems at the **Otto-Friedrich-University Bamberg** aims to fill, starting on the next possible date, **two positions** as

**Doctoral Student - Scientific Employee (m/f/d)**  
(Full-/or part time in "Entgeltgruppe" TV-L E 13)

**PostDoc - Scientific Employee (m/f/d)**  
(Full-/or part time in "Entgeltgruppe" TV-L E 13)

The positions are available for a term of 3 years (2 years PostDoc) initially with the potential for extension beyond that.

The group's research focusses on methods and technology to realise intelligent voice assistants like Amazon's Alexa or Apple's Siri and how to render the interaction with such systems as natural as possible. With the focus on the behaviour of the AI-system, machine learning techniques are the basis for the group's research on reinforcement learning for natural dialogue interaction, entity-based dialogue modelling and neural language generation.

## Possible Research Topics include:

- Reward modelling for Dialogue Policy Reinforcement Learning
- Weakly-Supervised Dialogue Policy Learning
- Automatic ontology creation
- Dialogue State Modelling and Tracking
- Hierarchical Reinforcement Learning for Dialogue Systems
- Natural Dialogue System Behaviour
- Explainable AI in Dialogue Systems
- Knowledge-learning through dialogue interaction

## Your role:

- Support of research and teaching efforts as well as grant proposals of the research lab
- Independent, self-sufficient research on a specific research topic
- Supervision of bachelor and master students
- Presentation of research results at national and international conference

## Your Profile:

- Completed university degree (MSc or equivalent) with focus: computer science, computational linguistics, machine learning or comparable
- Good proficiency in a programming language, e.g., Python
- Ability to work in a highly analytical, structured, and autonomous fashion
- Proficiency in English is required. Basic knowledge of German is helpful

## General:

The Otto-Friedrich-University Bamberg aims to increase the ratio of women in research and teaching and thus asks qualified women explicitly to apply. Applicants with disability (m/f/d) will have preference at otherwise equal qualification. The University Bamberg was certified as being a family friendly university by the Hertie foundation. The university focuses on the compatibility of family and career.

## Application:

Please send your complete application including a brief letter of motivation, CV, transcripts, and optionally a research project proposal, publication record and contact details of two references. Please send your application electronically as a single pdf file to the email address mentioned below stating the earliest possible starting date.

Applications received until 15 January 2023 will be reviewed with priority. After that applications will be reviewed until the positions have been filled.

**Contact:** Prof. Dr. Stefan Ultes ([stefan.ultes@uni-bamberg.de](mailto:stefan.ultes@uni-bamberg.de))  
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