University of Würzburg, Center for AI and Data Science (CAIDAS)
Chair for Data Science & Chair for Natural Language Processing

Researcher: PhD student or Postdoc (m/f/d)

Vision-Language-Action Models, **Embodied AI**, **Large-Scale Model Training**

CAIDAS Chairs for Data Science (Prof. Hotho) and Natural Language Processing (Prof. Glavaš) invite applications for a fully funded research position focusing on **multimodal representation learning for embodied AI**. PhD candidates as well as candidates with a PhD (i.e., postdocs) may apply.

Released	July 16, 2026
Position	Researcher, PhD student or postdoc (m/f/d)
Extent	Full-time, 100 % TV-L E13
Field	Embodied AI / Vision-Language-Action foundation models
Duration	initially 15 months; extension to a total of 36 months (very) likely
Location	Würzburg, Germany (partially remote possible)
Start	As soon as possible
Deadline	Until filled – early application encouraged

SUMMARY

The position is embedded in the Robotics & Perception Cluster of the Bavarian AI Foundation Model initiative, a large-scale collaboration aiming to build a joint foundation model for robotic perception and manipulation. The successful candidate will work on the “brain” of this framework: a world model mapping multimodal observations (video, language, and optionally haptics or other sensor streams) to latent action representations, with a focus on Vision-Language-Action (VLA) architectures that combine the physical inductive biases of video pretraining with the language understanding of Vision-LLM backbones.

We are looking for candidates with a strong background in deep learning and prior experience in at least one of: multimodal representation learning (Vision-Language models, Vision-Language-Action models), robot learning, world models, or self-supervised representation learning; along with strong programming skills (Python, PyTorch). Experience with large-scale, distributed model training and corresponding frameworks is a plus.

ABOUT US

The Center for AI and Data Science (CAIDAS) is an interdisciplinary AI research center of the University of Würzburg. CAIDAS is among the leading AI institutes in Germany, with exceptionally strong results in the areas of Computer Vision and Natural Language Processing. The CAIDAS Chair for Data Science (Prof. Hotho), develops modern methods and applications across diverse domains – from state-of-the-art language models and climate modeling to security research and knowledge

integration into LLMs. The CAIDAS Chair for Natural Language Processing (Prof. Glavaš), which ranks among the top 5 NLP groups in Germany, develops state-of-the-art massively multilingual language models, including multi-modal models that incorporate visual and audio (speech) input.

WHAT WE OFFER

- Full-time research position (100 % TV-L E13)
- World-class research supervision (with the goal of publishing at top-tier ML/NLP conferences)
- Dedicated GPU / compute allocation for the project
- Access to leading German compute infrastructure (e.g. NHR@FAU projects)
- University clusters (julia2) and the Chairs' own compute resources cluster
- Freedom to, within the project scope, develop and pursue your own research ideas
- A cooperative, eager-to-learn and experienced team
- Modern workplace equipment
- The possibility of (partially) working from home

YOUR PROFILE

- A Master's degree in Computer Science, Artificial Intelligence, Mathematics, Statistics, or a related discipline (with a strong grade average)
- Expert knowledge of Python and PyTorch
- Prior experience in large-scale distributed (i.e., multi-node) training of vision and/or language models and familiarity with corresponding frameworks (e.g., Megatron, DeepSpeed, FSDP2)
- Ideally, experience working with Vision-Language and/or Vision-Language-Action models
- Motivation for independent, innovative research; team spirit and analytical thinking
- Proficiency in (scientific) English

HOW TO APPLY

A complete application should include: a curriculum vitae, a position-tailored motivation letter, relevant transcripts/certificates, and publications or thesis (if applicable).

Please combine all documents into **one single PDF** and send it by email to:

`caidas-nlp@uni-wuerzburg.de`

Prof. Dr. Andreas Hotho & Prof. Dr. Goran Glavaš,
University of Würzburg, Center for AI and Data Science (CAIDAS)

The University of Würzburg is committed to fostering a diverse and inclusive working environment. We warmly welcome applications from people of all backgrounds, and we particularly encourage qualified women to apply. Applicants with disabilities are highly valued and will be given priority in the case of equal qualifications.