

## Researcher – PhD Candidate (f/m/d)

Full-time 38,5 h/w in Graz

Join us in shaping the future of Human-Centred and Agentic Artificial Intelligence

Artificial Intelligence is evolving from reactive algorithms to autonomous agents capable of decision-making and strategic planning. In an exciting new research project, a multi-disciplinary team of researchers with backgrounds from computer science, artificial intelligence, natural language processing, human-computer interaction and science and technology studies will investigate how these agents interact with humans, AI systems, and environments.

We are now looking for six PhD candidates in this exciting field, each of whom will work in one of the below research directions.

### RESEARCH DIRECTIONS:

- **Multi-agent collaboration in data-intensive scenarios:** How can such systems be deployed across cloud/edge infrastructures while maintaining efficiency in data management, communication, and computational resources?
- **Energy-efficient agentic AI:** How can we optimize the interaction between LLM-based AI agents and their tools for low-resource hardware by reducing inference costs while maintaining performance?
- **Reasoning capabilities of multi-agent AI:** Can LLM-based agents' reasoning be enhanced by explicit knowledge representation to support trustworthy human decisions?
- **Human-AI synergetic task performance:** Can we improve human-AI collaboration and task performance by integrating explicit knowledge representations into user interfaces?
- **Tracing and explaining decisions in multi-agent AI systems:** How can we trace and (visually) explain AI decisions in multi-agent systems for transparency and user control?
- **Modelling actors, interaction and agency in agent-centric AI:** How can we computationally model actor roles and interactions in multi-agent human-AI systems as the basis for understanding responsibility, fairness and trust in such systems?

### YOUR QUALIFICATIONS:

- Master Degree in Computer or Information Science, Data Science, Human-Computer Interaction, Computational Social Systems, or similar.
- Ability to work as part of a team, offer advice and receive feedback
- Excellent communication skills in English (knowledge of German is of advantage)

### WE OFFER:

- Flexible working plan and home office
- Contribute and work in a thriving multi-disciplinary future-oriented research and innovation environment.
- Innovative, challenging and diverse tasks
- Dynamic, creative and multicultural team
- Company events, health management, public transport -voucher and much more
- Exciting possibilities for professional and personal development

If you want to advance AI that is both innovative and ethical, please join our multi-disciplinary team by submitting your application documents, including a comprehensive CV and a motivation letter outlining your research interests. As we expect to work on all the above six research directions, please clearly state up to two preferred research directions in your motivation letter.

Applications should be directed to: [career@know-center.at](mailto:career@know-center.at)

We are required by law to specify the minimum gross salary according to the collective agreement, which is for the full-time position with some working experience of a minimum of EUR 3,843 gross per month (14 times per year).



Individual working  
hours & home office



You-Culture and  
informal working  
atmosphere



Modern & brand  
new office



Fitness and  
health at work



Team events and  
networking  
possibilities



Dynamic, creative and  
multicultural team



Career and  
development