

**Position available: Postgraduate Position / Junior Researcher, Bremen Spatial Cognition Center,
University of Bremen, Germany**

1 full Postgraduate Position / Junior Researcher

at the Collaborative Research Center

SFB 1320 Everyday Activity Science and Engineering, Universitaet Bremen

Project P03 - Spatial Reasoning in Everyday Activity

-Under the condition of job release / reference number: A123/17 –

- Project Description: -

Despite the seeming ease with which humans perform everyday activities such as, for example, (un)loading a dishwasher or setting the table, mastery of everyday activities by artificial cognitive agents has yet to be achieved. By focusing on the processing of spatial information, the aim of this project is to facilitate building artificial cognitive agents that master complex human-scale manipulation tasks. To this end project work will (a) investigate human processing of spatial information in everyday activities, (b) formalize human spatial cognition in computational cognitive models, and (c) employ the insight gained on the mechanisms governing human performance to provide information processing principles allowing to master everyday activities to a robotic platform. A particular focus of the project will be on principles that allow humans to keep the size of spatial problems manageable as well as on principles that allow direct action-based problem solving by exploiting the structure of the physical world.

- Qualifications: -

Applicants should have expertise in computer science / artificial intelligence and cognitive science and should hold a master or diploma degree in computer science, cognitive science, or a related field. They should be committed to interdisciplinary, team-based research and be fluent in spoken and written English.

Ideally, an applicant will also have knowledge of / interest in one or more of the following areas: computational cognitive modeling of human (spatial) cognition; qualitative spatial reasoning; affordance-driven information processing Additional training will be provided on the job.

- Main Tasks: -

- * Contributing to conceptual and computational modeling of human information processing (in particular, processing of spatial information when performing everyday activities).
- * Planning and conducting exploratory studies and analyzing human activity patterns.
- * Preparing manuscripts for publication in international journals / at conferences.

- Conditions of Employment: -

Salary is according to the German Federal pay scale (TV-L 13, approx. EUR 44,000 p.a.). The position is available as soon as possible until the end of June 2021.

- Application Deadline -

July 9th (or until a suitable candidate is found)

As the University of Bremen intends to increase the proportion of female employees in science, women are particularly encouraged to apply. In case of equal personal aptitudes and qualification, disabled persons will be given priority. Applicants with a migration background are welcome.

**Position available: Postgraduate Position / Junior Researcher, Bremen Spatial Cognition Center,
University of Bremen, Germany**

- How to Apply & What to Do in Case of Questions: - Please address questions about the position and send your application under the reference number (preferably by email) to:

PD Dr. Holger Schultheis <schulth@informatik.uni-bremen.de>

Bremen Spatial Cognition Center
Universitaet Bremen
P.O. Box 330 440
28334 Bremen / Germany

For a paper-based application, please make sure to only send document copies as all received application material will be destroyed after the selection process.