

**From:** "Thomas Barkowsky" <barkowsky@informatik.uni-bremen.de>  
**Subject:** **Open Position - Junior Researcher in Spatial Cognition SFB/TR 8**  
**Date:** 4 October 2011 13:50:42 CEST  
**To:** <barkowsky@sfbtr8.uni-bremen.de>  
**Cc:** <kranz@informatik.uni-bremen.de>  
**Reply-To:** <barkowsky@informatik.uni-bremen.de>

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- OPEN POSITION -

Postgraduate Position / Junior Researcher  
at the Transregional Collaborative Research Center  
SFB/TR 8 Spatial Cognition, Universitaet Freiburg

Project R6-[SpaceGuide] Human and Robot Navigation in Structured  
Environments

-Under the condition of job release / (vorbehaltlich der Mittelfreigabe)

- Project Description: -

The mission of our research group is to better understand human wayfinding processes and their interaction with the environment. The overall aim is to employ cognitive science to work together with architects on improving the design of buildings with evidence-based design approaches as well as user-centered evaluation methods, ranging from real-world observation studies to Virtual Reality experimentation

The goal of R6-SpaceGuide is to investigate human and robot navigation in structured environments. We compare the influence of structured features and regularities on the successful wayfinding of human and robotic agents in complex, often public buildings like airports, hospitals or libraries. The psychological side of the project combines theories and methods from human-computer interaction, environmental psychology and architectural design to investigate human behavior and identify which features in the environment need to be improved to foster better orientation and wayfinding.

More information on the research center can be found at  
<http://www.sfbtr8.spatial-cognition.de/>

- Qualifications: -

Applicants should have expertise in cognitive psychology and should hold a master or diploma degree in psychology, cognitive science, human geography, geographic information science, or a related field.

As the research topics are strongly connected to the domain of architecture, candidates with a master level degree in architecture will also be considered, especially if they are interested in obtaining a PhD-level qualification in cognitive science. (The University of Freiburg

does not offer architecture degrees, so any further degree in architecture would need to be sought in collaboration with architectural partner labs in Newcastle, London, Karlsruhe or Zurich or others). If a suitable candidate initially does not meet the formal qualifications of the position (e.g. bachelor level degree only or qualifications from a different field), but shows potential for cross-training into the field in our team, we can offer a qualification scholarship for a start-up time of up to one year, or as a visiting doctoral student from another university.

The position is a 50% position, thus geared towards a doctoral researcher. The successful applicant is expected to work on obtaining a doctoral degree in the scope of this position. We may be able to extend the position to 100% for an advanced doctoral candidate or a post-doc researcher by spring/summer 2012.

Candidates 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 more than one of the following areas: cognitive psychology; environmental psychological; psychological experimentation; human-computer interaction / usability engineering; spatial cognition; architectural design. Additional training will be provided on the job.

- Main Tasks: -

- \* Planning, preparing, conducting and analyzing psychological experiments on human wayfinding in real buildings. Supervising student assistants in all steps of experimentation.
- \* Work with our Virtual Reality team on planning and implementing lab-based wayfinding experiments based on VR software WorldViz Vizard.
- \* Theoretical analysis of wayfinding tasks based on human-computer interaction approaches (cognitive walkthrough, cognitive task analysis, simplified GOMS modeling)
- \* Conduct spatial analysis of buildings (e.g. space syntax analysis) or collaborate with architects on such analyses; collaborate on design of virtual buildings for studies.
- \* Preparing manuscripts for publication in international journals / at conferences.

- Conditions of Employment: -

Salary is according to the German Federal pay scale (TV-L 13, 50%

position, approx. EUR 17,000 p.a.). The position is available from December 2011 until the end of 2014.

Application deadline: 20. October 2011 (or until a suitable candidate is found).

As the University of Freiburg 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.

- How to Apply & What to Do in Case of Questions: -

Please address questions about the position and send your application (preferably by email) to:

PD Dr. Christoph Hölscher <hoelsch@cognition.uni-freiburg.de>

SFB/TR 8 Spatial Cognition  
Universitaet Freiburg  
Friedrichstr. 50  
79098 Freiburg / 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.