- OPEN POSITION -

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

Project R1-[ImageSpace] - Mental Representations of Spatial Environments

-Under the condition of job release / reference number: A189/10 –

- Project Description: -

Mental reasoning about spatial environments often involves specific and task- sensitive spatio-analogical or quasi-pictorial mental representations. Mental processes dynamically construct and explore these representations to obtain desired spatial information and they do so with restricted working memory capacities. One goal of the project R1-[ImageSpace] is to build a cognitive architecture which comprises the components and processes necessary to accurately model human spatial cognition. A second focus is on how to best employ such architectures in applications that assist or train humans in spatial cognition tasks (e.g., in architectural design and spatial planning). Empirical studies are used to inform and evaluate modeling work (e.g., to identify the nature of the representation formats employed during reasoning) as well as developed assistance tools.

More information on the project can be found at www.sfbtr8.spatial-cognition.de/project/r1/

- Qualifications: -
Applicants should have expertise in computer science / artificial intelligence and cognitive psychology 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 more than one of the following areas: computational cognitive modeling of human spatial cognition; psychological experimentation; model-based human-computer interaction. Additional training will be provided on the job.

- Main Tasks: -

* Contributing to conceptual and computational modeling of human spatial cognition.

* Applying cognitive models to computer-based training and tutoring.

* Planning / Designing and conducting experiments; statistical analyses of
 experimental data.

* Management of experimental lab and equipment.

* Preparing manuscripts for publication in international journals / at conferences.

The successful applicant is expected to work on obtaining a doctoral degree in the scope of this position.

- Conditions of Employment: -

Salary is according to the German Federal pay scale (TV-L 13, approx. EUR 34,000 p.a.). The position is available from January 2011 until the end of 2012 with the possibility of extension. Application deadline: 30. November 2010 (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.

- 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:

Dr. Holger Schultheis <schulth@sfbtr8.uni-bremen.de>

SFB/TR 8 Spatial Cognition
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.