OPEN POSITION

1 Research Assistant / Doctoral Researcher

SFB/TR 8 Project [DesignSpace], Universität Bremen

(TVL 13, approx. 32,000 to 40,000 p.a. gross)

Reference Number A16/10

The project “DesignSpace: Assistive Intelligence for Spatial Design Tasks” investigates the application of formal (logical) representation and reasoning techniques for the development of tools and methodologies that provide assistive intelligence for spatial design tasks. The present emphasis in this project is on the paradigm of (spatial) intelligence driven iterative refinement of designs in the architecture domain. Of specific interest to the project are formal methods in spatial representation and reasoning, and logic-based approaches to diagnosis, recommendation and explanatory reasoning.

Selection Criteria:

Applicants should have a degree (diploma, master's, or doctoral degree) in Computer Science or in a related field. Strong interest in interdisciplinary collaboration and solid practical development skills are absolutely essential.
The applicant should have qualifications / experience / demonstrated interests in the following fields:

- Artificial intelligence - Qualitative reasoning, Logic
- Diagnosis and Recommendation Systems
- Knowledge of one or more of the following is valued:
  - Answer-Set Programming (ASP), Abductive Logic Programming (ALP)
  - Spatial representation and reasoning (e.g., CSP, geometric modelling)
- Strong interest and experience in software development and programming; one or more in each category desirable:
  - At least one imperative and one declarative language, e.g., C++, Prolog, Python
  - OGRE, OpenGL, QT, ODE
- Understanding of spatial design for architecture, and/or familiarity with design tools and standards such as ArchiCAD, Industry Foundation Classes would be considered an advantage

**Scope of the position:** We offer the opportunity to gain research experience in a modern and enthusiastic research environment with strong interdisciplinary and international links. Responsibilities include research and project work, publication of research results, supervision of student projects, and participation in the activities of the SFB/TR 8 Center. Further information about the SFB/TR 8 Center may be obtained at: [http://www.sfbtr8.spatial-cognition.de/index.html](http://www.sfbtr8.spatial-cognition.de/index.html)

**Duration and Commencement:** The position is initially available from 1 March 2010 onwards for a duration of 1 year and is under condition of job release. Subject to several conditions, primarily linked to the performance and interest of the successful candidate, possibilities for further continuation also exist. The SFB/TR 8 Center is planned to continue until the end of 2014.
**Application deadline:** 5 February 2010 (or until a suitable candidate is found). Universität Bremen is an equal opportunity employer. Women are especially encouraged to apply. Handicapped applicants with equal qualifications will be given preferential treatment.

*For further questions, please contact:* Mehul Bhatt (bhatt@informatik.uni-bremen.de)

**Application procedure:**

1. Prepare a complete application package with Cover letter, CV with at least 2 academic references & publication list (if applicable), and a brief statement addressing the selection criteria that match your skills, experience and interest. Additional details/links to the practical deliverables of your previous work are most welcome and appreciated.

2. Send a copy of all papers in PDF or Word format by email to cosy@informatik.uni-bremen.de, together with a CC to Mehul Bhatt at: bhatt@informatik.uni-bremen.de. Please make sure to use the subject line: ‘DSpace Job Appl: Your Surname’.

3. Please expect to receive an acknowledgement by email within 1 week of submission.

If you would like to send your application by Post instead, please submit a copy of your entire package *without any original documents* to the mailing address** below. Deadline for the applications is **12.02.2010**

**Postal application address:**

c/o : Gracia Kranz
SFB/TR 8 Spatial Cognition
Universität Bremen
P.O. Box 330 440
28334 Bremen / Germany

**SFB/TR 8 Spatial Cognition**

Universities of Bremen and Freiburg.

Prof. Christian Freksa (Director)

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