Open Position with the Computer Graphics and Virtual Reality group

**PhD position (full-time)**
with the SFB/TR 8 Spatial Cognition / Department for Mathematics and Computer Science at the University of Bremen, Germany,
to be filled as soon as possible

Project I8-[DextrousSpace] - Dextrous Spatial Interactive Manipulation of Virtual Objects
Salary is according to the German Federal pay scale (TV-L 13, gross salary approx. EUR 40,000 p.a., supported by the German Research Foundation (DFG)).

**Project Description:**
The Computer Graphics and Virtual Reality group is seeking a researcher for scientific work on natural and direct interaction methods in virtual environments.
The successful candidate will be expected to take over responsibility for and perform both theoretical research and practical development towards a PhD degree. Research areas will be novel virtual interaction methods, physically-based simulation, and geometric acceleration data structures. One goal of the work is to develop realistic, real-time, direct spatial manipulation methods, in particular those that involve dextrous manipulations using virtual hands and other metaphors. Major challenges are the real-time requirements, numerical robustness, and physical plausibility. Another goal are 3D virtual system control methods. As part of your work you will present your results at internationally visible venues.

**About us:**
The position offers great opportunities for collaboration with other members of the Collaborative Research Center on Spatial Cognition, a vibrant research environment where a broad range of activities related to space and cognition are being pursued (ranging from robotics to neuro-informatics to psychology). The successful candidate will be working with a dynamic, friendly, and helpful team of computer graphics researchers. Our research group is part of the school of computer science at University of Bremen. Our university is a mid-sized university with about 20,000 students, offering a broad range of fringe benefits such as sports facilities, cultural activities, and daycare.

**Qualifications:**
Candidates should have an excellent Master’s degree or equivalent in computer science or mathematics, or related disciplines such as physics, etc. Ideally, you have specialized in real-time computer graphics or physically-based simulation, and you have good knowledge about applied mathematical methods and parallel programming. Required skills are solid experience in C++ software development, and a good command of English (reading/writing/speaking). In addition, the successful candidate will be highly self-motivated, passionate about their work, and have good ability to work both independently and in a team in a multidisciplinary environment.

**Conditions of employment:**
The position is available for a period of 1.5 years. Upon successful completion, the position can be prolonged (with different funding) for another 3-year period under the condition of job release.
Application deadline: August 31, 2013 (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:* Applications should comprise a cover letter, complete CV, degree certificates (including list of courses and grades), names and contact details of at least two referees, and other credentials if any (e.g., recommendation letters, publications, etc.). Please address questions about the position and send your application (preferably by email) with reference number **A201/13** not later than 31st August 2013 to:

Prof. Dr. Gabriel Zachmann, zach at cs.uni-bremen.de

SFB/TR 8 Spatial Cognition
University of Bremen
Bibliothekstr. 1
28359 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.