Open Position with the Computer Graphics and Virtual Reality Group Bremen

Research associate -A251/16-

with the Computer Graphics and Virtual Reality Group

at the University of Bremen, Germany.

Salary is according to the German Federal pay scale, TV-L 13, full-time.

**Job Description:**
The work in this position will comprise 3D geometric algorithms and virtual reality in the context of medical simulation. The particular application is the training of surgeons for procedures involving the replacement of hip joints. The successful candidate will collaborate with other German partners providing 3D models, force-feedback, and game software platforms. The job of the successful candidate is to work on geometric algorithms for penetration computations and the simulation of milling during the procedure. At the end of the project, after two years, the system should enable surgery students to experience a hip joint procedure both visually and haptically in a virtual reality setup. This will greatly facilitate the training of surgeons and help them make fewer mistakes when beginning to practice.

**About us:**
The position offers great opportunities for collaboration with other members of both the computer graphics group and other groups. This job provides a vibrant research environment where a broad range of activities related to 3D graphics algorithms and virtual reality are being pursued. 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, a lot of them from abroad, 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 related disciplines such as mathematics, physics, etc. Required skills are solid experience in C++ software development, and a good command of English (reading/writing/speaking). Ideally, you have specialized in real-time computer graphics or 3D geometric algorithms, you are capable of effectively applying mathematical methods, and you have good knowledge in GPGPU programming. In addition, the successful candidate will be highly self-motivated, passionate about their work, and have good ability to work both independently as well as in a team in a multidisciplinary environment. Speaking German, at least for conversation, is a plus.

**Conditions of Employment:**
For the time being, the position is available until 31.8.2018 (under the condition of job release).

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 including any achievements,
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.).

We encourage candidates to apply immediately, but will continue to review applications until the position is filled.

If you have any questions about the position, please do not hesitate to address them to the above email address.

Please send your application with all necessary information until November 18, 2016 indicating the position number A251/16 to:

Prof. Dr. G. Zachmann
University of Bremen
Bibliothekstr. 1
28359 Bremen / Germany
Or by Email: zach at cs.uni-bremen.de

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