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Position type: full-time post-doctoral researcher  
Location: Innsbruck, Austria  
Duration: 2 years with a potential for extension  
Start date: open immediately until filled  
Main focus: interactive augmented reality in the medical domain

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## **Post-Doctoral Position in Interactive Augmented Reality**

The Interactive Graphics and Simulation Group, established in 2014 at Innsbruck University, Austria, invites applications for the position of a full-time post-doctoral researcher with focus on interactive augmented reality.

### **Description**

We are seeking a highly-qualified postdoctoral researcher with interest and skill in augmented reality, especially addressing aspects of user interaction. This denotes aspects of visual display, such as shadowing, light source estimation, occlusion handling, and global illumination; as well as aspects of interaction, such as haptic feedback, haptic augmentation, and real-virtual object interaction. The potential application of the augmentation system will be in the medical domain.

Candidates should have earned a doctoral degree in a relevant field, possess a publication record commensurate with experience, and have demonstrated strengths in the areas outlined further below. A candidate showing enthusiasm for leading-edge research, team spirit, and capability for independent problem-solving is sought. Applicants are expected to assume active roles in research projects, and in supervision of junior researchers and students. Responsibilities also include minor teaching requirements.

The position is open immediately until filled. It is offered for the duration of two years, with a potential for extension, on the level of non-permanent university research staff. Salaries are internationally competitive and commensurate with qualification and experience.

### **Candidate Profile**

- PhD degree in Computer Science, Applied Mathematics, or related fields
- Good knowledge in augmented reality techniques
- Experience in global illumination and/or computer haptics is desired
- Basic knowledge in physically-based simulation is also a plus
- Good publication record in relevant fields
- Knowledge and experience in programming in C/C++
- Good level in English, both written and spoken
- Some experience in teaching and project management

### **Environment**

The position is available within the Interactive Graphics and Simulation Group at Innsbruck University, Austria. The applicant will join a modern and well-equipped research lab, which was initiated at ETH Zurich, Switzerland, and in 2014 moved to Innsbruck. The group has many years of experience in research related to surgical simulation, surgical planning, and interactive medical applications.

Innsbruck University, founded in 1669, is a public academic institution, located in the capital of the Austrian federal state of Tyrol, beautifully situated within the Alps. It offers a complete set of academic curricula, with currently about 28'000 students. The Institute of Computer Science has been founded in 2001, offers degrees at Bachelor, Master, and PhD level, and covers a broad range of focal research areas. The city of Innsbruck provides an outstanding quality of life and recreational opportunities all around the year. A large student population imprints a distinctive, international atmosphere upon this lively mountain city.

### **How to apply**

Candidates should send electronically a statement of motivation, their curriculum vitae with a publication list, URLs to 2-3 selected publications (online only), contact information of at least two references, and scans of relevant transcripts and diplomas.

The compiled material should be sent as a PDF to Prof. Dr. Matthias Harders:  
[<matthias.harders@uibk.ac.at>](mailto:matthias.harders@uibk.ac.at).

Please feel free to get in contact in case of questions.