



2017-11-08

## **Postdoctoral researcher in Computer Science to BTH, Blekinge Institute of Technology with placement at the Department of Creative Technologies in Karlskrona**

Reference number: BTH 3.1.5-0407-2017

### **Work description:**

Recent years have seen a tremendous increase of visual information being delivered to corporate and consumer markets along with interaction over a variety of human-machine interfaces as well as fixed and mobile networks. As such, we are at the beginning of a new era of immersive experiences that aims at enhancing everyday experiences, providing new ways on how people communicate with each other and in collaborate groups, and making these experiences more realistic, engaging, and satisfying.

This Postdoctoral Researcher position is associated with the research project “Human-centered computing for novel visual and interactive applications” funded by the Knowledge Foundation of Sweden in co-production with industry. The position has a focus on Visual and Interactive Computing, which includes disciplines such as computer graphics, visualization, game technology and computing where people are at the center. The position includes contributing to the development of our growing research and education environment in Visual and Interactive Computing at the Karlskrona campus, together with existing researchers and lecturers. The development work should be carried out in collaboration with the surrounding environment, industry and society. In addition, education at the bachelor-, master-, and doctoral level is included - primarily in education programs and research in the field of game technology.

### **Eligibility:**

Qualified to be employed as postdoctor is the person who has:

taken a Degree of Doctor, a Degree of Doctor in the fine, applied and performing arts or who has a foreign degree deemed as equivalent to a Degree of Doctor. The persons who have taken their degrees maximum three years before the expiration of the application period should come in question first. The person who has taken the degree earlier should also come in question in the first hand, if there are particular grounds. Particular grounds refer to leave due to sickness, parental leave, clinic service, commissions of trust in trade unions or other similar circumstances.

### **Meriting qualifications:**

Documented experience and skills in one or several of the following areas:

- Real-time graphics programming (2D/3D)
- Virtual Reality (VR) / Augmented Reality (AR)
- Digital game development
- Experiment design, execution and statistical analysis
- Visual perception, eye-tracking technology and applications

**Basis for assessment:**

We will recruit the applicant who, after an overall assessment of competence and skills, is evaluated to have the best prerequisites for implementing and developing current tasks and contributing to the positive development of the department. Great emphasis is placed on personal suitability.

**Employment:**

100 %

**Commencement:**

2018-01-01

**Duration:**

Two years

**Contacts:**

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**Application:**

Please submit your application, marked with the reference number for the position, by November 30, 2017 at the latest by email to [diarium@bth.se](mailto:diarium@bth.se). The application shall include a cover letter describing your interest in the employment and the research area, your resume, and copies of diplomas and other documents that verify your qualifications.

For more information, please refer to <https://www.bth.se/eng/about-bth/vacancies-at-bth/> or our HR department, +46-455-38 50 36.

**Others:**

We have chosen media for this recruitment and therefore avoid contact with advertisers or other recruitment services.

## Department of Creative Technologies

*The Department of Creative Technologies (DIKR) was established on January 1, 2014. DIKR belongs to the Faculty of Computing and currently comprises of 22 members including professors, researchers, lecturers, and administrative staff.*

*The department focuses on visual and interactive computing, which includes disciplines such as computer graphics, visualization, game technology and computer use where people are at the center. A rapidly growing challenge is the collection, processing, analysis and appropriate visualization of data. Other relevant and central challenges include how people interact effectively with computers and how acquired knowledge can be integrated into design and development processes of new technical solutions. Example application areas of visual and interactive computing include digital game technologies, mobile multimedia, virtual reality (VR), augmented reality (AR), mixed reality (MR) entertainment, infotainment, health, public sector, etc. Our research is mainly in the following areas:*

- *Computer graphics and visualization: Modeling, animation, rendering, VR, AR, analysis and processing of image and video data as well as effective visualization and communication of 2D and 3D data.*
- *Digital game development: Game development processes, new interaction technologies (biofeedback) for games, serious games, and games for entertainment.*
- *Methods and techniques for human-computer systems: Human-computer interaction, interaction design, visual perception, user studies and eye control and eye tracking techniques.*

# BTH, Blekinge Institute of Technology

*Blekinge Institute of Technology, BTH, is one of the most distinctly profiled universities in Sweden, where applied IT and innovation for sustainable growth are in focus. In our education and research, engineering and IT are integrated with other disciplines such as urban planning, industrial economics, design and health sciences to contribute to solving the challenges facing society. Everything we do at BTH has three distinct perspectives: innovation, sustainability and in real life, which means cooperation and exchange with both business and industry as well as society. A characteristic of BTH is the close cooperation with industry and society, which permeates both education and research at the regional, national and international level. We conduct education and research at a high international level. BTH has two faculties – the Faculty of Computing and the Faculty of Engineering.*