



24.08.2018

The Zuse Institute Berlin (ZIB) is a non-university research institute under public law of the state of Berlin. The division Mathematics for Life and Materials Sciences is offering a post-doctoral

research position (f/m)
reference code: WA 41/18
pay grade E 14 TV-L Berlin (100 %)

The position is offered at the earliest possible date and will be a fixed-term contract for two years with the option to be extended.

Tasks

In the area of clothing simulation, research and application questions of garment scanning, geometric modelling and visualisation, as well as the simulation and animation of clothing worn on the human body are investigated. A team of six to eight people will work on modeling, simulation and visualisation in the context of 3D fit analysis.

The following tasks are relevant for the geometric modelling of garments for simulation and visualisation:

- model-based geometric reconstruction of textiles from 3D measurement data
- algorithmic detection of seams for geometric modelling
- conversion of the geometry into problem-specific data structures for the numerical simulation, as well as interactive manipulation and visualisation
- fast collision detection during deformation and fitting
- removal of unwanted ambient light effects from measurements
- development of innovative reconstruction concepts based on methods of machine learning

We expect communication and teamwork skills, creativity, as well as a high degree of independence and commitment. We offer a challenging professional environment with excellent equipment and a friendly working atmosphere, as well as opportunities and support for further qualification for scientists at all stages of their careers. Scientific publications at the highest international level are our goal. Participation in international and national conferences is welcome and possible.

Requirements

- PhD in computer science, mathematics, physics
- very good knowledge and skills in software development (C++, Python)
- experience in several of the following areas: Image processing, computer graphics, geometrical modelling, computer-aided design
- interest in the use of machine learning methods
- willingness and ability to analyse scientific publications
- good command of spoken and written English

The candidature of women is encouraged. Since women are underrepresented in information technology, ZIB is trying to increase the proportion of women in this research area.

Persons with disabilities will be given preference, when equally qualified.

Please send your application, quoting the reference code **WA 41/18**, including CV in tabular form and all relevant documents by **September 23rd, 2018** (date of receipt) to

Zuse Institute Berlin (ZIB)

- Administration -
Takustr. 7
14195 Berlin

or electronically as pdf-form to: jobs@zib.de.

You find our privacy policy on our website at www.zib.de/impressum.

Further information about the position can be obtained on our website www.zib.de from Dr. Stefan Zachow (E-mail: zachow@zib.de).

For further job offers please visit our website at www.zib.de.