



Paderborn University is a high-performance and internationally oriented university. Within interdisciplinary teams, we undertake forward-looking research, design innovative teaching concepts and actively transfer knowledge into society. As an important research and cooperation partner, the university also shapes regional development strategies. We offer our employees in research, teaching, technology and administration a lively, family-friendly and equal opportunity environment, a lean management structure and diverse opportunities. **Join us to invent the future!**

In the **Faculty of Computer Science, Electrical Engineering and Mathematics** at the **Department of Computer Science – Research Group Computer Graphics and Visualization** – the following position is to be filled as soon as possible

## Research Assistant (w/m/d)

(Salary level according to 13 TV-L)

with 100 % of the regular working hours. This is a qualification position within the meaning of the German Act on Fixed-Term Research Employment Contracts for Academic Staff (Wissenschaftszeitvertragsgesetz “WissZeitVG”), which serves to promote a doctoral procedure or further academic qualification. The position is, depending on the qualification achieved to date, initially limited for a period of three years.

The research group led by Prof. Dr. Marcel Campen, <https://graphics.cs.upb.de>, judging by publications at the field's most renowned international conference SIGGRAPH, is one of the most visible in the field of Computer Graphics in Germany. Here you have the chance to, in a motivated team environment, tackle highly relevant and timely research challenges and actively push forward the current state of the art.

Ideally, you already possess in-depth knowledge in one or more of the areas that touch on the project topic detailed below. These include mesh algorithms, mesh data structures, geometric modeling, numerical optimization, finite element techniques, geometric machine learning. Likewise beneficial is extended programming experience, especially in C++.

### Project description and responsibilities:

- Research in the context of the DFG-funded research project „Higher-Order Mesh Optimization with Guarantees“. Above all, you will work on the design, development, and analysis of novel algorithms for the modification of triangle and tetrahedral meshes, with the goal of improving their quality. In the focus of the project are meshes of higher order, with curved nonlinear elements, defined through polynomial or rational functions, e.g. Bézier elements. Such meshes are highly demanded, for instance for simulation scenarios, their automatic generation and optimization, however, not sufficiently researched yet
- Publication, presentation, and transfer of research results
- Teaching duties usually amounting to 4 teaching hours (SWS) per week, e.g. in the area of computer graphics / geometry processing / visualization

### Recruitment requirements:

- Scientific university degree (Master or equivalent) in Computer Science, Mathematics, or a closely related subject
- Solid command of written and spoken English
- Basic knowledge in the thematic context of the project topic

### We offer:

- Flexible working hours and the individual option of mobile working
- Wide range of health, counseling and prevention services
- Attractive fringe benefits such as childcare facilities and sports activities
- Opportunities for internal and external training and development
- Additional benefits in accordance with the collective agreement of the federal states (TV-L), such as annual bonuses and capital-forming benefits as well as the VBL supplementary pension scheme

Applications from women are particularly welcome and, in case of equal qualifications and experiences, will receive preferential treatment according to state law (LGG), unless there are preponderant reasons to give preference to another applicant. Part-time employment is generally possible. Applications from disabled people with appropriate suitability are explicitly welcome. This also applies to people with equal opportunities in accordance with the German social law SGB IX.

Please send your application documents (in particular cover letter, CV, certificates and transcripts of record, and possibly recommendation/reference letters), preferably in a single PDF file, stating the **Ref. No. 7296** to [sek-cgv@lists.uni-paderborn.de](mailto:sek-cgv@lists.uni-paderborn.de).

Questions regarding this position can be directed ahead to Prof. Dr. Marcel Campen: [marcel.campen@uni-paderborn.de](mailto:marcel.campen@uni-paderborn.de).

Information regarding the processing of your personal data can be located at:

<https://www.uni-paderborn.de/en/zv/personaldataenschutz>.

Prof. Dr. Marcel Campen  
Faculty of Computer Science, Electrical Engineering and Mathematics  
Paderborn University  
Warburger Str. 100  
33098 Paderborn



HR EXCELLENCE IN RESEARCH

