



## FULLY-FUNDED PHD and POSTDOC POSITIONS

### Human-Computer Interaction / Computer Vision / Applied Machine Learning

The Chair for Human-Computer Interaction and Cognitive Systems at the University of Stuttgart, Germany, led by Prof. Dr. Andreas Bulling, invites applications for fully-funded PhD and PostDoc positions in Human-Computer Interaction, Computer Vision, or Applied Machine Learning. Positions are situated in the context of a prestigious five-year [ERC Starting Grant “Anticipatory Human-Computer Interaction”](#), the [DFG Excellence Cluster Data-Integrated Simulation Science \(SimTech\)](#), and the [German Research Foundation \(DFG\) Transregional Collaborative Research Center “Quantitative Methods for Visual Computing”](#), in an environment that offers much **creative freedom** and support to conduct **cutting-edge research**.

### QUALIFICATIONS

A successful candidate has demonstrated **outstanding academic performance** (rank at top of class) and a strong technical background in one or several of the following research areas:

- **Human-Computer Interaction/Information Visualisation**, e.g. design and evaluation of interaction techniques and adaptive information visualisations, user interface and user experience design, empirical evaluation of interactive systems
- **Computer vision/Computer graphics**, e.g. 3D graphical (face, hand, body) modelling, egocentric vision, scene understanding, pose estimation, object detection/recognition
- **Machine learning**, e.g. deep and recurrent neural networks, generative models, (inverse) reinforcement learning, visual question answering or captioning, cognitive modelling

A strong interest in applying computational methods to human-computer interaction, for example intelligent user interfaces, is required. **Excellent programming skills** are expected. Previous experience with Python, TensorFlow, or CUDA is an advantage. Strong **team working** and **critical thinking skills**, aptitude for **independent and creative work**, as well as **fluent English written and presentation skills** are essential.

### POSITION

We offer fully-funded PhD and PostDoc research positions with a **flexible start date**. Salaries are internationally competitive based on state employee salary scheme **TVL-E13/A13 (100%)** that includes health and social insurance as well as contributions to the retirement pension plan. You will develop, implement, and evaluate new interactive systems, interaction paradigms, and computational methods, as well as write up the results for **top international venues**, such as - depending on focus - CHI, UIST, IUI or UbiComp/IMWUT, CVPR, ICCV, ECCV, or NeurIPS. You will contribute to the **leadership of ongoing projects**, will have the opportunity to **advise undergraduate and graduate students**, and contribute to the **teaching activities** of the group.

### ABOUT THE GROUP

The Perceptual User Interfaces group works at the intersection of computer vision, applied machine learning and human-computer interaction. The group develops computational methods as well as ubiquitous and wearable systems to **address fundamental challenges in sensing, modelling, and analysing everyday non-verbal human behaviour**. The group is **well-known** for this line of work, has a **strong presence** in leading conferences in the above fields, and publications from the group are **frequently distinguished with best paper awards (16 in the last four years)**. You will work among **gifted colleagues** and **experienced scientists** and have access to **excellent infrastructure**, including several regular series of lectures, research seminars, and invited talks by international guests, as well as a high-performance GPU cluster. For details see: <https://www.perceptualui.org/>



## **ABOUT THE UNIVERSITY**

The University of Stuttgart is cradled in what is simultaneously one of Germany's most beautiful landscapes and one of Europe's most economically successful areas. The region is known for a high standard of living, beautiful surroundings, and easy access to other major metropolitan areas. The university is one of the top nine leading and oldest technical universities (TU9) in Germany and consistently ranked among the world's best universities in international rankings. The University of Stuttgart is part of the Cyber Valley initiative (<https://cyber-valley.de/en>), a new center for artificial intelligence research that brings together partners from science and industry to boost intelligent systems research and development in the Stuttgart-Tübingen region, specifically in the areas of machine learning, robotics, and computer vision.

The Department of Computer Science is located on the university campus in Stuttgart Vaihingen. It is devoted to cutting-edge research in computer science ranging from foundations (algorithms, programming logics, computer architecture) to a variety of application domains (computer vision and graphics, machine learning and robotics, intelligent systems). With its vibrant research environment and its attractive Bachelor and Master programs, the Department attracts top students from all over the world. The department offers a stimulating and collaborative environment. It is equipped with high-class research facilities and has close links to leading international companies in and around Stuttgart (e.g. Bosch AI, Mercedes-Benz, Porsche).

## **APPLICATIONS**

Applications must be submitted by email and include a cover letter (describing research experience, fit for position and future interests), a CV, study transcripts, copies of high-school degrees, and contact information of two references. Optionally, up to two selected own publications or theses can be included in a second pdf (max. 5 MB). The application should also indicate earliest date of availability. There is no fixed application deadline; applications are considered until all positions have been filled.

Please send your application to [hcics-application@vis.uni-stuttgart.de](mailto:hcics-application@vis.uni-stuttgart.de).

Should you have questions about the position, please contact Prof. Dr. Andreas Bulling <https://www.perceptualui.org/people/bulling/>