



**Faculty/Departement** Mathematics, Informatics, Natural Sciences/Informatics  
**Seminar/Institute** Computer Vision Group

Universität Hamburg invites applications for a Research Associate for the project “**Computer Vision for Adaptive Cross-modal Sensor Data Acquisition**” in accordance with Section 28 subsection 3 of the Hamburg Higher Education Act (Hamburgisches Hochschulgesetz, HmbHG). The position commences as soon as possible.

It is remunerated at the salary level TV-L 13 and calls for 100 % of standard work hours per week\*.

The fixed-term nature of this contract is based upon Section 2 of the Academic Fixed-Term Labor Contract Act (Wissenschaftszeitvertragsgesetz, WissZeitVG). The term is fixed for a period of 3 years.

The University aims to increase the number of women in research and teaching and explicitly encourages qualified women to apply. Equally qualified female applicants will receive preference in accordance with the Hamburg Equality Act (Hamburgisches Gleichstellungsgesetz, HmbGleiG).

### **Responsibilities:**

Duties include academic services in the project named above. Research associates can also pursue independent research and further academic qualifications.

### **Specific Duties:**

The candidate will work in the Computer Vision Group headed by Prof. Dr. Simone Frintrop at the department of Informatics. The focus of the group is on developing algorithms in the context of mobile vision devices such as autonomous robots or head-mounted camera systems. Main topics of research are visual attention, saliency prediction, and object discovery.

The candidate will work within the new research project "Adaptive Cross-modal Sensor Data Acquisition", which is a cooperation between the University of Hamburg (UHH, groups of Prof. Dr. Gerkmann and Prof. Dr. Frintrop) and the Technical University of Hamburg (TUHH, groups of Prof. Dr. Knopp and Prof. Dr. Schlaefer). Goal of the project is to develop algorithms to analyze images and other sensor information in order to determine the parts which are most promising for further analysis. This enables to prioritize the data processing in order to efficiently utilize computing and time resources. The research in our group will focus on the computer vision aspects of the project, involving saliency detection, the combination of vision data with other modalities such as audio or medical data, probabilistic approaches for active vision, and deep learning approaches in computer vision.

\* Full-time positions currently comprise 39 hours per week.



Universität Hamburg

DER FORSCHUNG | DER LEHRE | DER BILDUNG

The tasks of the research associate include developing and implementing new algorithms, performing experiments to evaluate the new methods, writing scientific publications, as well as traveling to conferences and workshops to present the work. It is possible to participate in teaching. The position includes the possibility to achieve further academic qualifications. We are interested in a highly motivated person who is interested in working with us in a pleasant working atmosphere.

**Requirements:**

A university degree in a relevant field. This can be for example computer science, engineering, physics, mathematics etc. Additionally, knowledge of computer vision and good programming skills are required. Knowledge of machine learning and especially deep learning is helpful, as well as knowledge of Matlab, Python, the computer vision library OpenCV, and Deep Learning libraries such as Tensorflow or Caffe. Fluent English, spoken and written, and good communication skills are mandatory. Knowledge of German is helpful, we expect the willingness to learn German for non-native German speakers.

Severely disabled applicants will receive preference over equally qualified non-disabled applicants.

For further information, please contact Kerstin Diop ([diop@informatik.uni-hamburg.de](mailto:diop@informatik.uni-hamburg.de)) or consult our website at <https://www.inf.uni-hamburg.de/en/inst/ab/cv.html>.

Applications should include a cover letter, curriculum vitae, and copies of degree certificate(s). The application deadline is Jan 14th, 2018. Please send applications to: [diop@informatik.uni-hamburg.de](mailto:diop@informatik.uni-hamburg.de) in a single pdf document (the subject in the email shall start with "APPLICATION"). Links to the master thesis of the applicant and to previous publications, if available, are appreciated.