



Universität Hamburg
DER FORSCHUNG | DER LEHRE | DER BILDUNG

As a University of Excellence, Universität Hamburg is one of the strongest research universities in Germany. As a flagship university in the greater Hamburg region, it nurtures innovative, cooperative contacts to partners within and outside academia. It also provides and promotes sustainable education, knowledge, and knowledge exchange locally, nationally, and internationally.

The Faculty of Mathematics, Informatics and Natural Sciences, Department of Informatics, Signal Processing (SP) invites applications for a

RESEARCH ASSOCIATE SPEECH AND AUDIO SIGNAL PROCESSING

- SALARY LEVEL 13 TV-L -

The position in accordance with Section 28 subsection 1 of the Hamburg higher education act (Hamburgisches Hochschulgesetz, HmbHG) commences on the earliest possible date.

This is a fixed term contract in accordance with Section 2 of the academic fixed-term labor contract act (Wissenschaftszeitvertragsgesetz, WissZeitVG). The initial fixed term is three years. The position calls for 100% of standard work hours per week.* This position is also suitable for part time employment.

RESPONSIBILITIES:

Research associates will be expected primarily to teach and conduct research. The research associate will also have the opportunity to pursue further academic qualifications, in particular a doctoral dissertation. At least one-third of set working hours will be made available for the research associate's own academic work.

SPECIFIC DUTIES:

The general focus of the Signal Processing (SP) research group is on developing novel methods for processing speech and audio signals with applications in speech communication devices such as hearing aids, mobile telephony, and voice-controlled assistants.

Typically, the performance of these devices drops drastically when interfering sources, noise, and/or reverberation are present, e.g. in a noisy restaurant or in traffic. The goal of the candidate is to develop novel methods to enable or facilitate speech communication and voice control in such acoustically challenging scenarios. In this context, possible PhD topics include source separation, source localization, speech enhancement and multimodal signal processing. Typical methods include Bayesian estimation, statistical and physical modeling, as well as modern machine learning methods such as deep neural networks.

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

The typical tasks of a PhD student include developing new concepts, implementing new algorithms, performing experiments to test the methods, writing scientific publications, and traveling to conferences and workshops to present the work. Furthermore, the position includes the responsibility to teach 4 hours/week in the computer science department. We are interested in a highly motivated person who is interested in working with us on cutting edge research in a pleasant working atmosphere.

REQUIREMENTS:

A university degree in a relevant field. Examples are Computer Science, Data Science, and Electrical Engineering. Good knowledge in signal processing or machine learning is required as well as good programming skills in Python or similar. Experience with deep learning techniques is a plus and knowledge of speech and audio processing and statistics is helpful. 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.

The Free and Hanseatic City of Hamburg promotes equal opportunity. As women are currently underrepresented in this job category at Universität Hamburg according to the evaluation conducted under the Hamburg act on gender equality (Hamburgisches Gleichstellungsgesetz, HambGleiG), we encourage women to apply for this position. Equally qualified and suitable female applicants will receive preference.

Qualified disabled candidates or applicants with equivalent status receive preference in the application process.

For further information, please contact Timo Gerkmann (timo.gerkmann@uni-hamburg.de) or consult our website at <http://uhh.de/inf-sp>.

Applications should include a cover letter, a tabular curriculum vitae, and copies of degree certificate(s). Please send applications by 13.12.2020 to: sp-office@informatik.uni-hamburg.de in a single PDF document. Please start the subject of your Email with [APPLICATION LS1].

Please do not submit original documents as we are **not** able to return them. Any documents sub-mitted will be destroyed after the application process has concluded.