

The Professorship for **Audio Information Processing (AIP)** of the Technical University of Munich focuses on psychoacoustics, virtual and room acoustics, hearing devices, auditory models and its applications.

We are looking to fill a key position in our team in **Cochlear Implant Research, Psychoacoustics and Virtual Acoustics** with a

# **Post-doctoral research scientist**

as a full-time position to start at the earliest convenient date.

# MAIN RESPONSIBILITIES:

- Research on binaural hearing and auditory scene analysis with normal hearing listeners and/or users of auditory neuronal prostheses (cochlear implants) and/or
- Development of techniques for and experiments in interactive audio-visual virtual reality
- Development of listening tests and statistical analysis of the results
- Publication in English-language scientific journals and presentations at conferences
- Supervision of student projects, assistance with teaching and with raising external funding.

# **QUALIFICATIONS:**

- Successfully completed doctoral degree (PhD) in one of the following areas: psychoacoustics, audio technology, acoustics, signal processing, neuroscience, medical physics/audiology, or a related area
- Knowledge and experience desirable in designing and analyzing psychoacoustic experiments, models of the auditory system, virtual acoustics, audio signal processing, direct stimulation of cochlear implants, algorithms for hearing devices, auditory scene analysis, and binaural hearing
- Very good programming skills in Matlab, Python, or C/C++
- Excellent written and oral communication skills as well as experience with scientific publications
- Knowledge and command of the German language desirable if working with cochlear implant users
- Interest in basic research and the development of technical systems for medical applications
- Flexibility and good interpersonal skills
- Interest in supervising students, helping with teaching, and raising external funds.

### We offer...

you the opportunity to join an interdisciplinary team, to work with up-to-date technical equipment including an anechoic chamber hosting a virtual reality system, and to learn about the latest methods in hearing research. Our close interaction with the Bernstein Centre for Computational Neuroscience Munich (<u>www.bccn-munich.de</u>), the Munich School of BioEngineering (<u>www.bioengineering.tum.de</u>), the Graduate School of Systemic Neurosciences (<u>www.gsn.uni-muenchen.de</u>), the Hearing Research Network Munich, our extensive cooperation with industry and with scientific partners, and the numerous courses offered at TUM create an attractive environment with excellent perspectives for personal development. Please find further information at <u>www.aip.ei.tum.de</u>.

Employment is according to the state employees salary scheme (TV-L/E13) and is initially for 1 year with the option for extension. Women are explicitly encouraged to apply. Severely handicapped persons will be favored if they are equally qualified. In principle, the position could also be filled part-time.

### Interested?

I look forward to answering your questions on the phone (+49 89 289 28282) or by email. Please send your expressive application stating research interests **preferably by email** no later than **31 October 2017** to:

Prof. Dr.-Ing. Bernhard Seeber Professorship for Audio Information Processing Technical University of Munich Arcisstrasse 21; 80333 Munich, Germany Email: <u>aip@ei.tum.de</u>.