

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 audio applications.

For research on **communication in complex audio-visual virtual environments** we are looking for a

## Post-doctoral research scientist (m/f/d)

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

### Your responsibilities:

- Development of novel techniques for investigating communication ability in interactive audio-visual virtual reality involving the analysis of body, head and facial movements and of gestures
- Development of analysis methods for behavioral responses and statistical analysis of the results
- Research on binaural hearing and speech in complex acoustic conditions with normal hearing listeners
- Publication in English-language scientific journals and presentations at conferences
- Supervision of student projects, assistance with teaching and with raising external funding.

### Your qualifications:

- Successfully completed doctoral degree (PhD) in one of the following areas: psychoacoustics, audio technology, virtual reality, speech, multimodal interaction, signal processing, or a related area
- Knowledge and experience desirable in designing and analyzing psychophysical experiments, virtual reality techniques, behavior analysis, audio signal processing, machine learning, auditory scene analysis, binaural hearing, speech perception and speech tests
- Very good programming skills in Matlab, Python, or C/C++
- Excellent written and oral communication skills as well as experience with scientific publications
- Interest in basic research and the development of complex technical systems in virtual reality
- Flexibility and good interpersonal skills
- Interest in supervising students, helping with teaching and raising external funds.

### Our offer:

We offer you the opportunity to join a dynamic, interdisciplinary team, to work with cutting-edge technical equipment, including an interactive audio-visual virtual reality system hosted in an anechoic chamber, and to learn about the latest methods in hearing research. As part of the DFG collaborative research center "Hearing acoustics: Perceptual principles, Algorithms and Applications" (<https://uol.de/en/sfb-1330-hearing-acoustics>) you will work closely with our project partners at the University of Oldenburg. Our close interaction with the Bernstein Centre for Computational Neuroscience Munich, the Graduate School of Systemic Neurosciences, the Hearing Research Network Munich, our extensive cooperation with industry and with scientific partners, and the numerous talks and courses offered at TUM create an attractive environment with excellent perspectives for personal development. Please see [www.aip.cit.tum.de](http://www.aip.cit.tum.de), <http://y2u.be/yN7vD1khTOI> and [www.tum.de](http://www.tum.de) for information.

The position is initially limited to 30.06.2026. Salary is according to the Collective Agreement for the Civil Service of the Länder (TV-L/E13, 100%). TUM strives to raise the proportion of women in its workforce and explicitly encourages applications from qualified women. The position is suitable for disabled persons. Disabled applicants will be given preference in case of generally equivalent suitability, aptitude and professional performance.

### Your application:

I look forward to answering your questions on the phone (+49 89 289 28282) or by email. Please send your expressive application **by email** no later than **03 November 2024** to Prof. Bernhard Seeber, [aip@ei.tum.de](mailto:aip@ei.tum.de).

As part of your application, you provide personal data to the Technical University of Munich (TUM). Please view our privacy policy on collecting and processing personal data in the course of the application process pursuant to Art. 13 of the General Data Protection Regulation of the European Union (GDPR) at <https://portal.mytum.de/kompass/datenschutz/Bewerbung>. By submitting your application you confirm to have read and understood the data protection information provided by TUM.