

Open Positions

PhD position in Sensory Neurotechnology

About us

The Chair for Sensory Neuroengineering at the new Department Artificial Intelligence in Biomedical Engineering is looking for a PhD student to work on an innovative project in neurotechnology. Together with partners in the Cluster4Future SEMECO (TU Dresden, MED-EL, Fraunhofer) you will develop a Brain-Computer-Interface (BCI) for the next generation of hearing aids. To this end you will develop AI methods for analyzing brain signals and for steering the processing of acoustic signals. The new hearing aids with neurofeedback will then be able to automatically adjust to the needs of their users and to adapt in real time.

Your tasks

Non-invasive measurement of brain activity (EEG) during speech processing

Development and application of AI methods for the analysis of EEG signals as well as acoustic signals

Close collaboration with partners in the Cluster4Future SEMECO (TU Dresden, MED-EL, Fraunhofer)

Analysis and communication of the obtained results

Publication of the results in scientific journals and presentation of the results in national and international conferences

Your profile

Excellent degree in computer science, mathematics, physics, engineering or a similar discipline

Strong interest in neurological research at the interface to AI

Experience in one (or several) of these areas: signal processing, machine learning, neurobiology and neuroimaging

Excellent organisational capabilities

High own-initiative and desire to work independently

Excellent cooperation, communication and team skills

Excellent knowledge of written and oral English

Strong motivation to graduate within three years

Your benefits

AI at the interface to neurobiology is a highly timely topic of immense societal relevance. We offer you the possibility to actively shape this exciting and rapidly developing field. We support your work through:

A lively scientific environment within the Department and the possibility to cooperate with excellent partners at the TU Dresden, at the Friedrich-Alexander-University Erlangen-Nürnberg as well as with industry partners

An excellent environment to conduct leading science and to realise own scientific ideas

An excellent training in the development of AI methods for neuronal data

Development of your personal strengths, for instance through extensive courses on personal development

26 days of holiday per year

The remuneration is according to Group 13 of the German public service (TV-L) or equivalent stipend.

How to apply

To apply, please send a letter detailing your motivation, a CV, copies of your degrees and details of two referees. Please combine all documents into a single pdf and send them per email with subject

“Application PhD student” to Prof. Dr. Tobias Reichenbach (tobias.j.reichenbach(at)fau.de). Applications will be considered until the 10th of April 2026. The preferred start date of the PhD position is the 1st of October 2026.