wiss. Hilfskraft (m/w/d) (working student) for photoacoustic imaging

Department Artificial Intelligence in Biomedical Engineering (AIBE), Erlangen, Teilzeit, Befristete Anstellung, Bewerbungsschluss: 30.04.2025

Ihre Aufgaben

We are looking for a motivated student assistant to support the SENDERO project, which focuses on enhancing photoacoustic imaging (PAI) using deep learning. PAI is an advanced imaging technique that combines optical and ultrasound principles to visualize biological structures and quantify blood oxygenation. A key challenge in this work is achieving accurate and reliable segmentation of ultrasound images, which is important for clinical applications.

Your responsibilities may include:

- Implementing and evaluating state-of-the-art deep learning models for ultrasound segmentation and adapting them to our specific requirements
- Improve their performance over a wide range of clinical ultrasound datasets
- Conducting literature reviews on PAI or deep learning related topics
- Preprocessing and analysis of datasets from current clinical studies
- General coding tasks, unit testing, code documentation, preparing presentations,

Ihr Profil

Notwendige Qualifikationen:

- Bachelors or Masters student in Computer Science, Medical Engineering, or a related field
- Strong performance in Deep Learning, Pattern Recognition, or similar FAU lectures
- Hands-on experience with deep learning, especially image segmentation
- Advanced programming skills in Python, including relevant ML/DL libraries (e.g., PyTorch, NumPy, scikit-learn, git, etc.)
- Reliable, creative and enjoy working in a team

Wünschenswerte Qualifikationen:

- Experience with semi-supervised / unsupervised learning
- Prior knowledge of ultrasound, optical, or photoacoustic imaging technologies
- Experience with UI development and design

Stellenzusatz

Interested? Please send your CV, transcript of records, and a short (!), targeted cover letter to:

Moritz Schillinger, mailto:moritz.schillinger@fau.de

Interessiert?

Die vollständige Stellenausschreibung sowie alle Infos zum Bewerbungsverfahren finden Sie hier: