

Faculty of Electrical and Computer Engineering

The Institute of Principles of Electrical and Electronic Engineering für Grundlagen der Elektrotechnik und Elektronik, the Laboratory of Measurement and Sensor System Techniques (MST) (www.tu-dresden.de/et/mst/) offers a position as

Research Associate / Ph.D. Candidate / Postdoc Computational Ultrasound Imaging

(subject to personal qualification employees are remunerated according to salary group E13 TV-L)

starting as soon as possible. The position is initially limited for two years with the option of extension. The period of employment is governed by the Fixed Term Research Contracts (WissZeitVG). The position offers the chance to obtain further academic qualification (e.g. PhD, habilitation).

The Ultrasound Imaging Group at MST focusses on the research of new imaging modalities and signal processing concepts in the field of ultrasonics such as *deep learning*, *time reversal* and *super-resolution*. The main target of your research is to drive innovations of adaptive ultrasound imaging for new applications in medical imaging and biomedicine.

Task: The focus of your work will be the realization of projects in close cooperation with partners from the industry, clinic and research. This will be embedded in the university's excellence clusters and third party-funded projects. Your research includes the realization of an imaging system, hardware and software development of an ultrasound research platform, the characterization of measurement properties, the conduction of experiments as well as scientific and technical (*open source*) publication of the results.

Requirements: above-average university degree (Diploma/Master) in electrical or electronic engineering, telecommunications engineering, computer science, physics or related fields; fluent in English; ability to work independently and conceptually in a team; interest in practical and interdisciplinary collaborations with projects partners; knowledge in software development and digital signal processing; former experience in acoustics or Python are beneficial.

We offer: cutting-edge equipped labs; an own research topic with project funding; excellent contacts in research and industry; publication at international conferences, being part of an interdisciplinary and emerging team (with over 60 awards and honors within the last 10 years)

Please send your application documents preferably via e-mail to gpr-mst-sekretariat@mx.tu-dresden.de or to: TU Dresden, Fakultät Elektrotechnik und Informationstechnik, Professur für Mess- und Sensorsystemtechnik, Herrn Prof. Dr.-Ing. habil. J. Czarske, Helmholtzstr. 10, 01069 Dresden.

Applications are welcome from any human being. Please note that applications from people with disabilities will be given preference if they are equally qualified. Please submit copies only, as your application will not be returned to you. Expenses incurred attending interviews cannot be reimbursed.

For subject-related questions feel free to contact: Mr. David Weik david.weik@tu-dresden.de.