



The Hospital of the University of Munich, Germany, is one of the largest and most competitive university hospitals in Germany and Europe. 47 specialized hospitals, departments and institutions harbouring excellent research and education provide patient care at the highest medical level with approximately 10.000 employees.

Open postdoc position in Computer Vision & Neuroscience, Technical University Munich & Ludwig Maximilian University of Munich

We are:

The Department of Informatics at Technical University of Munich is one of the leading institutions in computer science in Germany (with the Informatics department ranking highest in Germany, and the TU Munich being leading technical school). The Image-based Biomedical Modeling group of the Department of Informatics is part of the Munich School of Bioengineering and located on the research campus in Garching.

The Institute for Stroke and Dementia Research (<http://research.isd-muc.de>) located in the biomedical science campus, is a part of Ludwig Maximilians University of Munich (ranked as the top university in Germany according to Times Higher Education World University Rankings). Our lab at the ISD has a state-of the art infrastructure including brand new fully equipped lab and offices (please visit www.erturk-lab.com). We offer an interactive and inspiring atmosphere, ideal for our researchers to publish in top-tier journals and develop their career at best.

Our groups:

Menze lab pursues research in the field of medical image computing, exploring topics at the intersection of physiological modeling, machine learning, and computer vision. A strong application focus on clinical and preclinical neuroimaging (Rempfler MedIA 2016, Rempfler ICCV 2017, Menze TMI 2016).

Ertürk lab explores biomedical mechanisms causing stroke and dementia. To this end, we use cutting-edge tissue transparency technique that we developed to map the neuronal, vascular and glial connections in healthy and diseased brain (Nature Medicine Ertürk et al. 2012, Nature Protocols Ertürk et al. 2012, Nature Methods Pan et al., 2016).

You are

- extremely curious about science and carry a great interest to make breakthroughs
- always looking for solutions to turn great ideas and opportunities into actions
- always willing to learn, and have the courage to ask questions when you don't know
- open to express your opinions and receive feedbacks / critics
- a team player and willing to work in a collaborative environment to share ideas and experiences
- willing to be part of a diverse team to make a dent in the universe

- have published previously in leading conferences in the field of machine learning, computer vision, or medical image computing, such as NIPS, CVPR, MICCAI, or in related journals.

The Position:

Our recent work (named uDISCO) published in Nature Methods in August 2016, and highlighted by media worldwide including New York Times, Wall Street Journal, Nature and Science magazines. uDISCO demonstrated the possibility of mapping entire neuronal, glial and vascular connections in intact organisms. As a next crucial step, we are looking for a computer scientist to transfer these imaging data into mathematical representations to extract map of the brain in healthy and diseased states.

Therefore, the candidates should have with a strong background in computer vision. The research project focuses on developing algorithms to trace/segment neuronal connections in whole brain (our technology generates the highest quality images of neuronal circuits coming from an entire brain). The successful candidate will be affiliated both with institutions.

Please email us your complete application documents (including CV, motivation letter, and contact info of at least 3 referees) as pdf to:

Prof. Dr. Bjoern Menze bjoern.menze@tum.de and Dr. Ali Ertürk ali.ertuerk@med.uni-muenchen.de, mentioning "ISD-IBBM application" in the subject title.

Please note that in case of transmitting your job application by e-mail your data will not be encrypted and might potentially be noticed or adulterated by unauthorized third parties. You are welcome to send us your documents by mail.

