

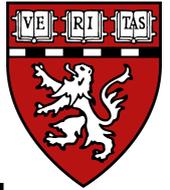


Postdoc/PhD in Deep Learning for Medical Image Computing

Bonn, Germany

PI: Prof. Dr. Martin Reuter, DZNE Bonn, Harvard Medical School, MGH

<http://reuter.mit.edu> and <http://goo.gl/amyWny>



We are looking for a **Postdoc** and a **PhD Candidate** in **Deep Learning for Medical Image Computing (f/m/d)** to join the research group of Prof. Martin Reuter at the German Center for Neurodegenerative Diseases (DZNE) in Bonn, Germany.

Research projects will focus on developing deep learning for image analysis, and for geometric shape processing. We develop methods to process multi-modal human MRI data, primarily with the aim to extract imaging biomarkers that can be leveraged to investigate and diagnose neurodegenerative disease and to provide a rational framework for targeting and monitoring therapy. Several of our methods are integrated into FreeSurfer (open source) and support neuro science globally.



Your profile:

We seek a Ph.D. candidate and a Postdoc with a Ph.D. in computer science, engineering or mathematics with a strong background in **deep learning (publications)** and interest in **medical image computing**.

Programming Skills: Programming experience in Python (C++ / R / MATLAB is a plus)
Experience in PyTorch / Tensorflow / Keras

Knowledge of state-of-the-art data analyses techniques and neuroimaging software, including FreeSurfer, ANTS, FSL is appreciated but not required. Highly motivated individuals with a record of productive research are encouraged to apply. Excellent written and verbal English communication skills are required.

We offer:

- Integration into the computational imaging environment at DZNE and interdisciplinary collaborations with other institutes (e.g. [Harvard Medical School](#), Boston, USA).
- Recently opened DZNE Research Facilities at Bonn Venusberg, hosting a neuroimaging center with 7T and 3T MRI scanners, as well as state-of-the-art computational infrastructure (HPC Cluster, CPU servers and GPU servers each with eight Tesla V100 GPUs).
- Collaboration with the [Rhineland Study](#), a prospective deeply phenotyped longitudinal cohort study with thousands of participants (aiming 30K) and high-quality MRI, OCT and MR motion tracker data.
- A strong mentoring program for career development.
- Bonn, located at the Rhine river adjacent to the Cologne metropolitan area, has one of the highest quality of life ratings, with an international student, research and business community.

Interested candidates are encouraged to contact Martin.Reuter@dzne.de (subject "MIC-PHD-19" or "MIC-PD-19"). We are looking forward to reading your application including your CV, contact information of two referees, a brief statement describing your personal qualifications and future research interests (up to 1 page), and a list of publications highlighting up to three most important ones (if possible in a single PDF file). Please ask if you have any questions. We look forward to hearing from you!



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