



UNIVERSITÄT ZU LÜBECK
STIFTUNGSUNIVERSITÄT
SEIT 2015

The Institute of Mathematics and Image Computing (head: Prof. Dr. J. Modersitzki, supervisor: Prof. Dr. Jan Lellmann) at the University of Lübeck is inviting applications for a

PhD/Doctoral Scholarship

limited to 3 years, as a member of the Graduate School for Computing in Medicine and Life Sciences. The position is to be filled at the next available date, no later than October 1, 2018. The successful candidate will be given the opportunity to work towards a doctoral degree according to the regulations of the graduate school.

At the Institute of Mathematics and Image Computing (MIC), we focus on mathematical approaches for medical image processing, in particular based on numerical optimization, partial differential equations, and calculus of variations. Mathematical image processing is a young and rapidly-changing field with excellent perspectives. The connections to many other disciplines offer challenging mathematical problems with high practical impact.

Our institute is associated with the Fraunhofer MEVIS institute at Lübeck. This unique combination provides excellent opportunities for cooperation on a regional and international level.

We offer a friendly and open-minded working environment with an extensive infrastructure as well as excellent opportunities for personal and professional development.

The University of Lübeck is a young and dynamical institution with close communication between faculty and students. The historical city of Lübeck offers a perfect combination of cultural and recreational activities in an ideal location close to the sea and to the major city of Hamburg.

Your responsibilities

You will actively work on state-of-the-art research projects in the area of machine learning for high-dimensional data in image processing, develop new models and methods, and implement them in a recent programming language.

We explicitly welcome publication of the research results in international scientific journals and at national and international conferences.

Apart from your research project, you will be expected to complete the PhD curriculum as a member of the graduate school.

Requirements

For this position, we require an above-average university degree (diploma/master's degree) in mathematics, computer science, physics, engineering, or a related subject. We expect a passion for machine learning and image processing, and the drive to pursue research independently as well as in a team.

Solid experience in a higher programming language (ideally Python) and the persistence to transfer difficult problems into structured code are a requirement. A solid mathematical background is a plus. Ideally, you have expertise in machine learning, numerical optimization, image processing, or computer vision, and have hands-on experience in a modern machine-learning framework (e.g., TensorFlow, Theano, PyTorch).

For any questions regarding this vacancy, please contact Prof. Dr. Jan Lellmann, jan.lellmann@mic.uni-luebeck.de, phone +49 451 3101 6110.

The scholarship comprises a monthly amount of 1,600 EUR and a health insurance allowance of up to 200 EUR for 3 years. For details on the terms and regulations of the graduate school, see <https://www.gradschool.uni-luebeck.de/>.

We aim at equal employment of male and female employees. Female applications will be preferred in the case of equivalent qualifications, suitability, and performance. We encourage applications of applicants with a disability, and invite applications of applicants with a migration background.

Please submit your application in digital form (preferably in PDF format) including the usual documents, in particular a letter of motivation, curriculum vitae, official certificates, and any available letters of recommendation. Please indicate if you require a visa. Applications must include the reference **CMLS-1/18** and must reach us by **July 23, 2018**. Please address your application to:

Prof. Dr. Jan Lellmann, E-Mail: jobs@mic.uni-luebeck.de