# isas

Leibniz-Institut für Analytische
Wissenschaften – ISAS – e.V.

The Leibniz-Institut für Analytische Wissenschaften - ISAS - e. V. is a research institute dedicated to the development and improvement of analytical methods and tools for health research and related fields. The ISAS is a member of the Leibniz Association and is publicly funded by the Federal Republic of Germany and its federal states.

In the group of Analysis of Microscopic BIOMedical Images (AMBIOM) within the department Biospectroscopy in Dortmund we invite applications for a

## PhD student (m/f/d)

A new project area in the institute is the development of artificial intelligence (AI) software for biomedical image analysis and building tools for AI-based software quality assurance.

You will be responsible for

- Develop new machine learning algorithms for microscopy image analysis problems, especially intracellular structure segmentations in 2D/3D/4D microscopy images, which are driven by real applications in life science research
- Implement AI-based microscopy image analysis software as python packages and napari plugins
- Develop unit-testing tools for bioimaging AI software
- Report findings and methods in conference and journal papers
- Conduct software demo and tutorials at national and international workshops

Your profile

- Masters, Diploma or equivalent degree in IT/computer science/statistics/applied mathematics/data science/biomedical engineering or of relevant scientific field
- A solid background in machine learning and/or computer vision
- Good knowledge of deep learning packages, PyTorch
- Familiar with continuous integration, continuous development, and Github Actions
- Familiar with algorithms for biomedical image analysis
- Good presentation and writing skills
- Proactive, independent, and solution-oriented way of working
- Fluent English (spoken and written)
- Publications at top-tier computer vision conference or journals is a plus
- Experience with open-source software development is a plus

Mitglied der
Leibniz
Leibniz-Gemeinschaft

Zertifikat seit 2011
audit berufundfamilie

We offer

- A clear research topic as well as multifold training and support for PhD students in framework of ISAS and the Leibniz association
- Training and scientific development opportunities in an international environment and an excellent working atmosphere in a very dynamic and professional team
- Extensive state-of-the-art equipment and infrastructure in various analytical methods
- The opportunity to present your data on international conferences and participate in workshops

Non-residents who apply for this job will receive help from the institute to find accommodation and to handle authorities. Applications from disabled applicants are welcome. ISAS supports the principle of equal opportunity for all employees and therefore particularly encourages women to apply.

The salary will be according to the German TV-L. The full-time position is available immediately and offered for 3 years.

ISAS collects and processes the personal data of its applicants in accordance with European and German legal regulations. Further information on data protection and the processing of personal data can be found at www.isas.de/datenschutzhinweise-fuer-bewerberinnen-und-bewerber.

Closing date for application is **December 17, 2023**. Complete applications with an extended curriculum vitae with full publication list, a cover letter, copies of your diplomas, a 2-page research statement that clearly describes your research profile and interests in the position as well as your expertise and methodological competencies, names and contact information of 2 references, if available, should be submitted (quoting the reference number **251/2023** in the subject header) as one pdf document to bewerbungen@isas.de. Informal requests are welcome and can be submitted to the Human Resources team (bewerbungen@isas.de). For further information on the institute please see: http://www.isas.de/en.