

Postdoctoral Position for Computational Pathology and Medical Machine Learning

The Computational Pathology lab at the Technical University of Munich (TUM) and Klinikum Rechts der Isar (MRI) is offering an open postdoctoral full-time position in medical machine learning.

The Computational Pathology Lab (www.path.med.tum.de/ai) at the Technical University of Munich (TUM) is looking for talented **postdoctoral researchers** to deepen their expertise and interest in **machine learning for medical image analysis**.

About us

TUM's new Computational Pathology and Medical Machine Learning lab uses methods from machine learning (ML) and artificial intelligence (AI) for the analysis of digital pathology images and related medical data in order to detect, segment and describe cancer and other diseases. Further applications are the discovery of new biomarkers and the prognosis of treatment response. For modeling, we use public and proprietary clinical and research data and generate our own repository of digital pathology images.

A further focus of our lab is the improvement of digital pathology workflows and integrations in complex hospital systems to foster equivalency, efficiency and adoption of digital pathology.

Our lab is located in the heart of Munich at the Klinikum Rechts der Isar (MRI), and is affiliated with TUM's Computer Science department, TUM's Medical School and the Munich Data Science Institute.

The Position

- Plan, develop and test novel computational models for the analysis of digital pathology image data
- Collaborate with pathologists and other domain experts
- As a PostDoc, help to acquire, mentor and teach students
- 3-years full-time, with option to extend (max 6y)

Requirements

- A solid background in a technical field such as computer science, bioinformatics, mathematics, computational life sciences or related
- Profound knowledge in machine learning, preferably deep learning for image data
- A strong publication history, preferably with conferences such as MICCAI, NeurIPS, ISBI, ICCV, ICML, ECCV, or others

- Fluent familiarity with at least one coding language for ML or data analysis (e.g. Python, R, ...)
- Familiarity to work on a computing cluster (HPC)
- Preferably experience in working with large medical image data
- Vivid interest in the analysis of microscopy images or similar medical image data
- Vivid Interest in interdisciplinary research, closely working together with pathologists, medical experts, computer scientists and other researchers
- Independent and pro-active work method (support and mentorship will of course be provided)

We Offer

- A young lab in which you can help to shape our lab culture from the beginning
- Opportunity to follow your own research interests, as well as to co-mentor students and make an academic career profile
- State-of-the art research in high-impact areas such as cancer research and patient care, in an exciting, interdisciplinary field
- Rich environment of groups for medical image analysis, medical data analysis, cBio, Radiology, nuclear medicine, molecular pathology, bioinformatics, and more
- Modern technical equipment
- Flexible work-conditions according to your individual needs
- Workplace in the middle of Munich
- Compensation according to TV-L 13
- TUM's benefits for employees (<https://www.tum.de/en/about-tum/working-at-tum/services-for-employees/>)
- A proper espresso machine ☺

Application

If you are interested to join us, please send us your application with CV, publication list, research statement and a cover letter via e-mail to peter.schueffler@tum.de.

