



PhD Student (m/f/d) in the field of Computer Vision / Data Scientist (m/f/d) in Cancer Research

Location:

Vienna

Research group:

Sabine Taschner-Mandl Group

Working hours:

Full time

To strengthen our excellent research team, which is focused on the development and research of innovative approaches for the treatment of childhood cancer, we are looking for a PhD Student (m/f/d) in the field of Computer Vision / Data Science (m/f/d) in Cancer Research. In this responsible role, you will have the unique opportunity to be part of a multidisciplinary competence center for pediatric oncology and to have a direct influence on the development of new cancer therapies.

The Taschner-Mandl group tackles unresolved questions of neuroblastoma pathogenesis and develops new diagnostic and therapeutic approaches to facilitate precision medicine for children with malignant tumors. We study determinants of inter- and intra-tumor heterogeneity and metastasis in neuroblastoma by combining molecular biology and computer-based research (e.g. Weiss T *et al.*, *Nat Comm* 2021, Kromp F *et al.*, *IEEE Trans Med Imaging*, 2021, Kromp F *et al.*, *Nature Sci Data* 2020). This project, will use multimodal imaging at subcellular resolution and apply state-of-the-art methods including machine/deep-learning-based approaches for image analysis (segmentation, registration), cell classification and integration with single cell RNA-sequencing data.

As a PhD student, you will

- Join an exciting, multi-disciplinary environment with lots of support for your personal and professional development from your supervisor, team, and peers
- Be part of an interdisciplinary research project on unraveling determinants of cancer metastasis in childhood cancer using automated immunofluorescence microscopy and imaging mass cytometry
- Learn to take on ambitious research in close collaboration with experimental and clinical researchers
- You will contribute from the start including planning of experiments and data acquisition
- You will provide thorough and creative thinking that makes these projects a success
- Monitor the literature and community resources to keep abreast latest developments and to identify information, data, and methods to integrate in your own work
- Write papers, present your research at conferences, apply for fellowships, and contribute to grants

Your profile

- Master's degree in a relevant subject (data science, biomedical engineering, medical informatics, visual computing, data science or similar)

- Excellent technical and programming skills (Python, Shellsript)
- Experience in image processing, machine/deep learning and feature extraction
- Motivation to pursue an ambitious research agenda
- Excellent verbal and written communication skills in English (German not required)
- Self-motivated, enthusiastic and eager to learn
- Good team player, commitment, and creativity
- Scientific mindset, problem solving attitude

Our offer

- A meaningful, inspiring, and international environment
- An outstanding working atmosphere in a strong team with excellent research and development opportunities
- Access to state-of-the-art infrastructure
- Flexible working hours, discounted lunch in our canteen and other great benefits
- Great location in the center of Vienna, a capital of biomedical research in Europe with excellent quality of life
- A fair and attractive salary package according to the Austrian Science Fund FWF (<https://www.fwf.ac.at/en/research-funding/personnel-costs/>)

Who we are

The St. Anna Children's Cancer Research Institute (CCRI), located in the center of Vienna, the world's most livable city and one of Europe's most important places for biomedical research and life sciences, is an international and multidisciplinary competence center striving to improve treatment of children and adolescents with cancer by connecting translational and clinical research with open-minded exploration of basic disease mechanisms. Through close cooperation between clinic and research, the CCRI provides an ideal environment for cutting-edge research and its translation into clinical practice. To achieve our ultimate goal of advancing the well-being of patients, the CCRI constantly pushes scientific boundaries and strongly promotes close collaboration and exchange with external institutions like the Medical University of Vienna, CeMM Research Center for Molecular Medicine of the Austrian Academy of Sciences, the Institute of Molecular Biotechnology of the Austrian Academy of Sciences (IMBA) and the Institute of Molecular Pathology (IMP).

The CCRI is an equal opportunity employer. We value diversity and are committed to providing a work environment of mutual respect to everyone without regard to ethnicity, religion, national origin, age, gender identity or expression, disability, or any other characteristic protected by applicable laws, regulations and ordinances.

Find more information here: <https://science.ccri.at/> or <https://kinderkrebsforschung.at/>.

Your application

We are looking forward to your application! Applications should at least contain your Curriculum Vitae, a cover letter, list of publications (please mark / explain your three top contributions), and the contact details of three references.

Apply now