Software engineer 100%

AREA Neuroorthopaedics / Center for Movement Analysis

ENTRY DATE

- Immediately or by appointment

DEPARTMENT

The UKBB's Department of Neuroorthopaedics has a dynamic team that looks after patients and their families in over 4,500 consultations per year, including transition to the adult department at the University Hospital of Basel (USB).

We are an expert center for orthopaedic deformities in rare neurological and neuromuscular diseases, and are therefore part of several multidisciplinary consultations (with colleagues from spine surgery, neurosurgery and the various pediatric departments).

Our neuro-orthopaedic team covers a wide range of lower extremity surgical procedures.

We have a state-of-the-art clinical center for Movement Analysis for neuro-orthopedic patients, but also patients with general deformities, sports injuries and spinal pathologies.

In addition to patient care, research projects and teaching activities are also part of everyday life at our university children's hospital.

MAIN TASKS

You will support our recently structured research group of the newly filled clinical structural professorship in neuroorthopaedics at the University of Basel in the areas of front-end / back-end databases, communication protocols between engineering/medical devices, and 3D modelling for virtual reality combined with motion capture.

You can expect an exciting and varied job in an international cross-clinic research environment (clinical neuroorthopaedics and movement analysis in collaboration with the Department of Bioengineering and the Department of Clinical Research at the University of Basel). This includes:

- The management and further development of web-based clinical/research applications,
- The development of user interfaces and communication protocols between devices (VR, medical imaging) and motion capture,
- The development of applications exploiting virtual reality,
- The development and coding of analytical algorithms,
- Communication and cooperation with various clinical departments and international research teams,
- The definition, design, and implementation of scientific studies relevant to the core research expertise of the group
- Contribute to the expansion and further development of the new cross-clinic neuro-orthopedics research group.

REQUIREMENTS

- MSc or PhD degree in a relevant field (e.g. software engineering, informatics, computer science, biomedical engineering),
- Demonstrated experience with SQL, C/C++, python, and web development,
- Experience in data management and analysis, good IT skills and experience with research software development,
- Some experience with motion capture and Unity would be appreciated,
- Excellent knowledge of English (C1) and German (B2),
- Excellent organizational and interpersonal skills and ability to communicate and collaborate effectively with diverse teams and disciplines,
- Self-motivation and the ability to work independently including willingness for continuous professional development.

WE OFFER

- A modern workplace with a pleasant international working atmosphere
- Family-friendly working time models that offer enough scope to balance professional and family tasks
- Support for continuous education
- High level of expertise and interdisciplinarity
- A varied area of responsibility

FURTHER INFORMATION

Prof. Heide Elke VIEHWEGER, deputy chief physician in orthopedics / clinical professorship and head of neuroorthopaedics and gait laboratory and Dr. Morgan Sangeux, technical and scientific leader of the gait laboratory, will be happy to provide you with further information.

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ONLINE APPLICATION

We look forward to receiving your online application! Please use our **online tool at www.ukbb.ch.** If you have any general questions about the position or the application process, please contact our HR team on +41 61 704 12 32.