Postdoc Position SpineBot

BIROMED-Lab

Department of Biomedical Engineering

Join us for the project "In SEA2 SpineBot for Safe Intraoperative Intervertebral Stiffness Assessment".

Project background:
The project "In SEA2 SpineBot" aims to develop a spinal robotic impedance measurement system for adolescent idiopathic scoliosis (AIS) patients. The intra-operative device enables in vivo biomechanical analysis of the spine, potentially revolutionizing AIS treatment in the future. The project is a collaboration between the BIROMED-Lab at the University of Basel, the Orthopedics Group of the University Children's Hospital of Basel | UKBB, and the Computational Bioengineering Group at the University of Bern.

Job description:
This position focuses on the continued development and optimization of a robotic device, kinematic modeling, as well as conducting clinical studies. Within the scope of this project you will collaborate with and supervise at least two PhD students at the BIROMED-Lab and take over project management responsibilities. You will collaborate with clinical and industrial partners in developing the experimental workflow. As post-doctoral researcher at the BIROMED-Lab you will actively be included in participation on our other research activities, in supervising PhD, master, and bachelor students, in writing research grants, and in supporting teaching activities. This is a fixed term position (up to 4 years). Start date upon agreement. The Department of Biomedical Engineering is located in the "Switzerland Innovation Park Basel Area Main Campus" in Allschwil, an exciting and modern working environment with various research groups.

Your profile:

- Doctoral degree in Biomechanics, Robotics, or a closely related discipline
- Strong practical skill set in kinematic and bio-mechanical measurements
- Experience in collaborating with clinical partners and/or industrial partners in the medical field
- Highly motivated team-player looking forward to work in applied medical robotics research
- You demonstrated excellent project management skills, have leadership experience, and are ready to take on project responsibilities
- Proficiency in written and spoken English is required
- Experience with medical regulatory affairs is a plus

Ready to revolutionize AIS Research? We are.

Apply for this project by email with the following materials:

- a letter of motivation that describes your interest in this position and relevant research experiences and capabilities (max. 1 page)
- CV and publication list including a link to your dissertation
- diplomas
- name, phone number, and email address of at least two references

Want to know more about us? check out www.dbe.biromed.unibas.ch and contact us by email for a lab visit.

University of Basel

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