inspire AG is the leading Swiss competence centre for product innovation and advanced manufacturing. As a strategic partner of ETH Zurich, our mission is to transfer knowledge and technology from research to Swiss machine, electrical and metal industries.

The research group Control and Automation at **inspire AG** offers the following position in collaboration with **Bota Systems**, an ETH Zurich spin-off, developing high-precision force-torque sensors that give robots a refined sense of touch. Bota Systems sensors are accelerating Robotic AI research by providing the accurate force feedback essential for imitation learning and RL policies in contact-rich applications.

Research Engineer – Imitation Learning for Robotics

Our research group works on increasing the efficiency of robotics systems in real-world deployment by enabling quick data collection, calibration, and policy training while ensuring safety and efficiency. For this, we develop novel learning-based control and policy optimization techniques.

We're looking for a skilled Research Engineer to develop and deploy cutting-edge reinforcement learning (RL) and imitation learning (IL) algorithms on real-world robot platforms. The project requires good theoretical and hands-on expertise in RL for robotics. Perfectly suited for those at the intersection of theory and application!

Your Tasks

- Develop customized RL and IL pipelines for industrial applications, going from theoretical analysis to implementation and testing on real data
- Develop and maintain the codebase to support various training modules and libraries
- Collaborate with our industrial partner and collect extensive datasets on real hardware
- Deploy policy on real robots in industrial applications

Required experience

- CH/EU/EFTA citizenship or a valid work permit for Switzerland
- Master's degree (university) in robotics, electrical or mechanical engineering, or CS.
- Solid theoretical and practical knowledge of RL and IL (e.g., behavioral cloning, inverse RL, dealing with distribution shifts) with applications in (industrial) robotics
- Hands-on experience with robotics or other mechatronics systems is a plus
- Excellent coding skills in python, ROS, and RL&IL pipeline experience on simulator and training libraries. Knowledge on C++ is a plus.
- Good foundation in linear algebra, numerical methods, optimization, and control theory.
- An excellent knowledge (written/oral) of English is a must. Knowledge of German is beneficial.

Required people skills

- Highly self-organized and structured way of working and solution orientation.
- High motivation and willingness to learn new skills.
- High level of teamwork, positive work attitude and creativity.
- Willingness to supervise and support student projects.

We offer a full-time position for a researcher in our group as part our collaboration with Bota. Through the close cooperation with our project partner, you will quickly establish contacts to industry. In our young team you will work at the forefront of today's knowledge in embodied AI. Please send your full application (cover letter, transcripts, CV, references) with reference "RL Robotics" to our HR department (hr@inspire.ch).

For technical questions, please contact Dr. Efe Balta, Head of Control and Automation (efe.balta@inspire.ch). Please also visit our website www.inspire.ch and Bota systems https://www.botasys.com