Tutor | HiWi

Improve Seamless Engineering – ROS2, Python, Simulation, and Robotics

Course Content: The Seamless Engineering course aims to provide master's students of mechatronics with knowledge of robotic hardware, such as manipulators and autonomous mobile robots (AMRs), as well as the associated software tools, such as the Robot Operating System (ROS2), based on a practical logistics problem. We are looking for motivated students to help improve and supervise this course.

Your Task:
- Familiarize yourself with the existing software stack and ROS2 Jazzy.
- Develop Python code for ROS2 to control and simulate robotics hardware.
- Computer vision tasks with OpenCV.
- Supervision of the course in the winter term 25/26.
- Practical work (CAD, manufacturing, electronics) on industry-related robotics hardware.

Required Skills:
- Fluency in written and spoken English,
- Motivation to improve yourself in key topics in robotics,
- Basic programming skills.

You don't have to be a coding guru to start! We value intrinsic motivation above all other skills. So, even if you just started your bachelor's degree, and want to get into robotics, this is the place to be.

Benefits: You will work closely with a highly motivated, diverse, English-speaking team of students and research associates. We offer flexible working hours and many opportunities for personal growth, such as workshops. Working as a tutor at the institute can also be a first step towards finding a suitable thesis topic.

Research Group:
Mobile Agents and Robotic Systems (MARS)

Focus:
Experimental, Practical, Simulation, Teaching

Majors:
Any MINT major, preferably mechatronics

Workload:
≥20 h/month

Start Date:
immediately

Language:
German/ English

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