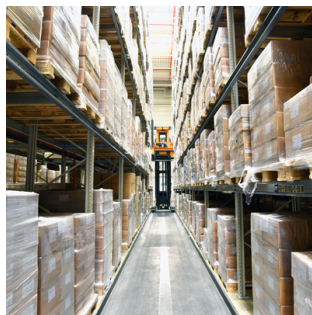
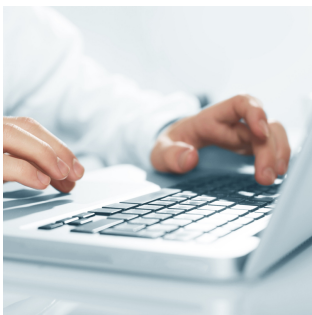


Side job, project thesis, internship, working student

Visualization of Objects in Intralogistics Using AR Glasses

As part of the “MouSe” project, a mobile, environment-monitoring sensor system is being developed for manually operated industrial trucks to improve safety and work efficiency in intralogistics.

The aim of this work is to test the use of AR glasses to provide forklift operators with precise, location-based visualization of detected objects. A drone-based sensor system captures objects in the forklift's surroundings, which are then classified using AI-based image processing. The AR glasses are designed to display the detected objects with correct perspective in areas that are not visible from the forklift operator's viewpoint (“wallhack”). Detected objects are to be displayed as proxy objects in order to reduce data volumes and thus latency.



Your tasks

- Literature review of existing approaches to AR glasses-based visualization of objects
- Design of a ROS2-based system architecture for processing sensor data
- Application of object recognition algorithms
- Integration and visualization of the results using AR glasses (“Wallhack”)
- Evaluation of the developed system in terms of accuracy, robustness, computational complexity, and latency

The evaluation of the results can also be conducted as part of a thesis.

Your profile

You are studying one of the following subjects:

- Mechanical Engineering
- Industrial Engineering
- Production and Logistics
- Mechatronics and Robotics
- or a related field

Are you interested in robotics, image processing, and algorithms? And do you enjoy learning new topics on your own? Then please feel free to apply!

You should already have basic programming knowledge and some experience with Python and ROS2.

Good written and spoken German and English skills are required.

We offer

- adequate remuneration
- independent work
- flexible working hours
- well-equipped workplaces
- home office by arrangement
- test execution
- long-term cooperation if necessary



Bitte sende deine aussagekräftige Bewerbung in einer einzigen PDF-Datei an jobs@iph-hannover.de.

Die Bewerbung muss Anschreiben, Lebenslauf sowie Prüfungsleistungen des Studiums / Zeugnisse enthalten.

Contact



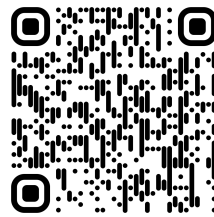
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