Master thesis, bachelor thesis, project thesis

Evaluation of suitable approaches for sensor data fusion

Most vehicles in intralogistics are driven manually, as human drivers are superior to automated systems in many respects from today's perspective. In order to harness human capabilities for automated systems, human driving behavior is to be simulated in a logistics environment and used to generate synthetic data sets. Based on this, an AGV is to be enabled via imitation learning to autonomously execute driving movements based on the implicit knowledge of experienced drivers.


Your tasks

The aim of the work is to evaluate different approaches to sensor data fusion, such as data-level fusion or decision-level fusion, using the sensors installed on the AGV. Taking into account the given restrictions and degrees of freedom, such as sensor position and sensor data quality, a suitable approach for data fusion is to be selected using a suitable evaluation method.

Subsequently, an implementation concept is to be developed for the selected approach.

These work packages are part of the work:

- Literature research on existing approaches to sensor data fusion
- Determination of an evaluation scale to evaluate the existing approaches with regard to the prevailing boundary conditions
- Evaluation of the approaches based on the evaluation scale
- Development of an implementation concept for the selected approach based on the sensor technology available at the industrial truck

Your profile

You are studying one of the following subjects:

- Mechanical Engineering
- Industrial engineering
- Production and Logistics
- or similar

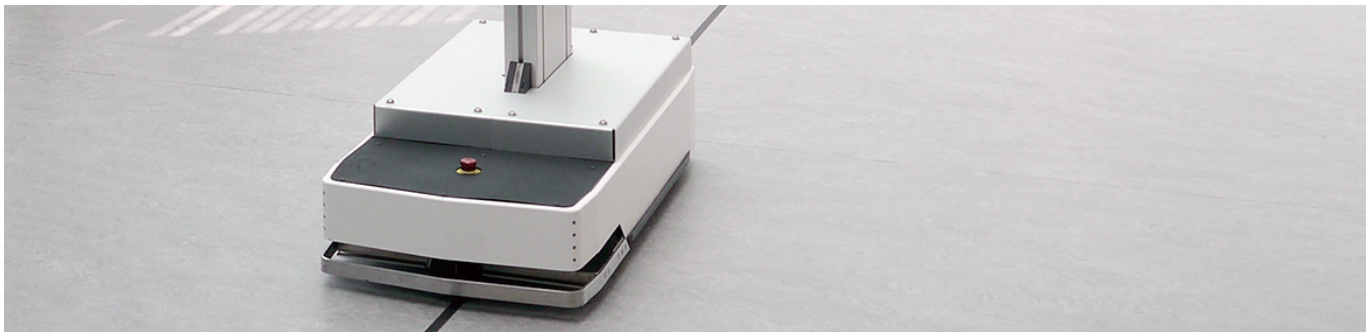
Are you interested in artificial intelligence, robotics and sensor technology? And do you enjoy independently familiarizing

yourself with new topics? Then send us your application!

Good written and spoken German and English skills are required!

We offer

- 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

Phil Köhne
M.Eng.

+49 (0)511 279 76-233

Still not convinced?

Besuche unsere Website oder Social Media Kanäle und bekomme einen ersten Eindruck von uns!

IPH - Institut für Integrierte Produktion Hannover gGmbH
Hollerithallee 6
30419 Hannover

www.iph-hannover.de