

Master thesis

Development of a Method for Manufacturer-Independent Selection of AGVs

To lower the barriers to the implementation of AGVs in SMEs, the FTS-Ready project aims to develop a method based on a maturity model (MM). The MM assesses, based on the existing infrastructure, the extent to which SMEs meet the requirements for implementing AGVs and identifies any measures that need to be implemented beforehand. Furthermore, the method includes a decision-support tool designed to propose a vendor-neutral AGV solution based on given logistical requirements. The entire method is implemented in a software demonstrator.



Your tasks

- Structured research on AGV/FTF technology classes, technical functionalities, operational limits, and criteria for vendor-neutral technology selection
- Systematic definition of decision-relevant input variables and suitable output or technology classes based on literature and FTS-Ready project results
- Identification and analysis of possible approaches to drawing conclusions
- Definition of selection criteria and criteria-based selection of a process
- Development of a transparent knowledge base and mapping logic between requirement profiles and AGV technology classes; for rule-based implementation, this includes the formalization of rules and conflict scenarios
- Prototype implementation (in Python) of decision support with recommendations or rankings, text-based justifications, and flagging of missing inputs
- Systematic validation

Your profile

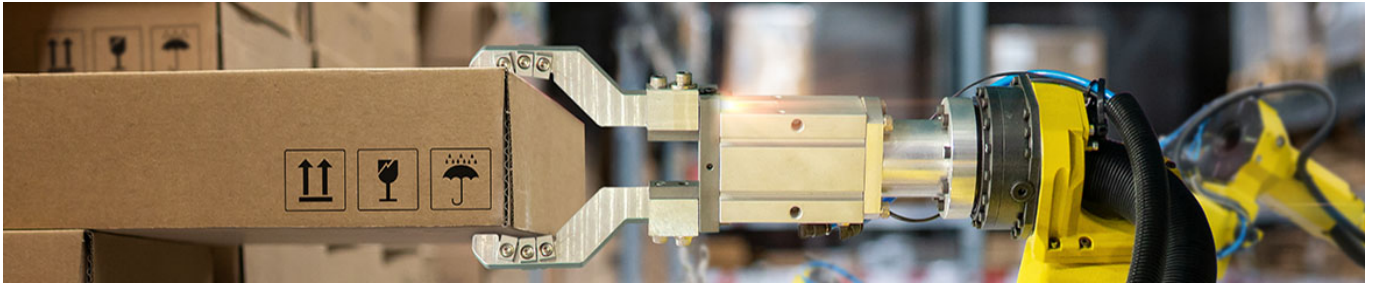
You are studying one of the following subjects:

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

You are interested in automation, data, etc., and are able to come up with good solutions on your own. Some experience with data analysis and software development is a plus. Good written and spoken German or English skills are required for the job.

We offer

- Independent work
- Flexible work hours
- Well-equipped workstations
- Work from home by arrangement
- Conducting experiments
- Long-term collaboration, if applicable



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.

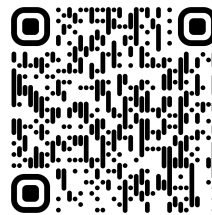
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