

Project 2

Industrial Internet based multi-AGVs scheduling in shop-floor

Contact information:

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Project description and objectives:

Enterprises aim to make products personalized concerning consumer requirements under the Industrial Internet environment. The logistics in shop-floor is more sophisticated due to the variability and complexity of products. Parts in workshops are delivered or transferred to workstation by various vehicles, for example forklift, crane, conveyor and automated guided vehicle (AGV). AGVs have been introduced to many different types of industry since its emergence in the 1950s and also developed into reliable and efficient equipment. It is critical to assure that AGVs are scheduled properly and efficiently to achieve the high performance of production system in intelligent shop-floor.



This project is aimed to develop an Industrial Internet based AGVs management system for shop-floor to support the construction of intelligent workshop. Wireless Sensors and controllers should be deployed for the precision and controlling of AGVs. Intelligent algorithms should be integrated for the task assignment and dynamic scheduling.

The objective of the internship is to contribute to our long-term project with some new idea and design based on what we are doing now.

Eligibility requirements:

Interested students should have basic knowledge of intelligent algorithms and be proficient in programming.

Main tasks:

Give one technical presentation.

Finish a report of internship.

Website:

Lab: <http://homepage.hit.edu.cn/yanjihong>

School: <http://www.hit.edu.cn/>