

Collaborative Robot Control

How to make the future of automation in manufacturing more flexible and modular?

In this Internship, the problem of collaborative multi-AGV control for transportation of heavy goods will be studied. We will start with a theoretical analysis of the nonlinear control design for multi-AGV systems with consideration of various disturbances and uncertainty in practice such as communication delay and actuator dynamics. The designed controller will then be validated on real mobile robots.

What part will you play?

- Contribute to excellent applied research in autonomous systems, control, and robotics.
- Advance academic results for use in commercially relevant applications.
- Study new methods and approaches in advanced control methods for robotics.

What you need to make real what matters

- Enrolled master student in electrical engineering, cybernetics, mechanical engineering or a related field of study.
- Solid knowledge with system theory, nonlinear control theory, and robotics.
- Solid knowledge of programming in MATLAB/Simulink, Python or C/C++.
- Hands-on experience of robot control will be beneficial.
- Business fluent German or English skills are desirable.

Contact

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