



Prof. R. Wattenhofer

## Linear Motor Synchronization

Nowadays, many industrial processing steps are highly automated. E.g. for food processing and also in the automotive industry, automatic processing and packaging machines are essential. Linear motors are often used in those machines to accomplish tasks such as sorting products, sealing and labeling. The drives can communicate over Industrial Ethernet.

The goal of this thesis is to come up with ways to achieve exact synchronisation of multiple drives over Industrial Ethernet and then implement it on the hardware. By synchronizing drives, the force of multiple motors can be combined.

We have some ideas on how to approach this task, but we would love to hear your take on this as well! If this sounds interesting to you, do not hesitate to contact us so we can have a chat.

This thesis will be done in collaboration with an external company. The main work location will be Spreitenbach.

**Requirements:** Programming experience, interest in hardware, and creative thinking. There will be weekly meetings with your supervisors to discuss progress and open questions.

**Interested? Please contact us for more details!**

### Contacts

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