



# Semester/Masterthesis

# Wireless Command of Agricultural Machine Actuators

The Chair of Agrimechatronics at the Technical University of Munich (TUM) invites for applications for a Semester/Masterthesis. M/F/D. Applications from disabled persons with essentially the same qualifications will be given preference. TUM strives to raise the proportion of women in its workforce and explicitly encourages application from qualified women.



#### **About the Position**

In the context of the FieldDataSync project, the remote control of binary actuators, such as the auger or the power take-off, should be developed. Since this remote-control can activate safety-relevant features, special care has to be taken to adhere to functional safety standards. The Chair of Agrimechatronics already has published a whitepaper on this subject and now searches for students to implement a proof of concept application.

#### About us

The Chair of Agrimechatronics (Prof. Oksanen) studies especially Intelligent Machines for Agriculture. The research themes include topics like tractors and other agricultural vehicles and robots, tractor-implement automation, communication technologies for vehicles, navigation, guidance and planning, positioning systems, model-based control of mechatronic systems, drives and power systems, and robotic implements.

## **Your Qualifications**

- Coding experience in Rust, Python, C/C++ or Simulink
- Interest in agricultural operations
- Experience in Middlewares such as Zenoh, DDS or OPC UA beneficial

## **Application Process**

**Start: as soon as possible.** Send your application in English by email to <a href="mailto:henri.hornburg@tum.de">henri.hornburg@tum.de</a> with the title "Semester/Masterthesis Application" including

- A short email elaborating your background and motivation
- Curriculum vitae (CV) in English and current transcript of records of your studies

Data Protection Information: When you apply for a position with the Technical University of Munich (TUM), you are submitting personal information. Data protection information according to Art.13 of the data protection basic regulation (DSGVO) for the collection and processing of personal data in the context of your application. By submitting your application, you confirm that you have acknowledged the above data protection information of TUM.