Semesterthesis position
Synchronization of Data in Dynamic Mesh Networks

The Chair of Agrimechatronics at Technical University of Munich (TUM)

invites for applications for a Semesterthesis position on the topic of **Synchronization of Data in Dynamic Mesh Networks**. 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 topic

Wireless in-field communication for agricultural machines poses special challenges in the distribution of data due to unreliable network connections and frequent re-grouping of the machines and thus a changed network topology. Since the data that is to be transmitted has varying requirements regarding the latency and consistency between the machines, it is important to investigate how the choice of data consistency algorithms affect the overall performance of the system.

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.

We offer

As a part of our team you will have an excellent opportunity to develop your skills in a supportive and inspiring environment. Our work is interdisciplinary, international, and in-depth, but also practical. We offer a possibility to obtain broad and profound expertise, both theory and practise, in the field of agricultural applications, technology and research.

Your qualifications

- Programming skills, preferably in Rust
- Interest in agricultural operations

Application process

Send your application by email to henri.hornburg@tum.de with title "Semesterthesis Mesh Data" including

- A cover letter (for example elaborating your background, interests and motivation)
- Curriculum vitae (CV) in English
- Current transcript of records

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.

| More information | https://www.lse.ls.tum.de/en/amx/home/ |