Master's thesis position
Model Based Reinforcement Learning for Autonomous Headland Turns

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

invites for applications for a Master's thesis position on the topic of "Model Based Reinforcement Learning for Autonomous Headland Turns". 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

Minimizing non-working time is a major goal for efficient automated agriculture. Much of this time is spent turning in the headland. We want to investigate, if Model Based RL can be used to learn the real vehicle's model and use this knowledge to quickly optimize the turning behaviour.

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

- A Bachelor's level university degree
- Previous Experience with Reinforcement Learning and Mobile Robotics
- An Interest in Agricultural Machinery

Application process

Send your application in English by email to [lukas.pindl(at)tum.de] with title "Master's thesis position application" including

- A cover letter (for example elaborating your background, interests and motivation)
- Curriculum vitae (CV) in English
- PDF copies of earned university degrees and transcripts of individual grades

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