

Interdisciplinary Project – Digital Agriculture

Smartfield – Large Language Models for a digital Assistant

IDP Project for students from the subject:

- Machine learning
- App-/Web-/ & industrial software engineering

Description

In many fields, Artificial Intelligence is increasingly becoming an independent decision-making and support tool for a variety of tasks. Even in agriculture, AI algorithms have the potential to take on the role of a farmer, promising increased yields and reduced environmental impact. This project is a follow-up to an IDP project where various AI algorithms were developed to autonomously manage agricultural fields.

In this subsequent project, the decision-making capabilities of the models will be integrated with a large language model to expand the website through a digital assistant, making the AI algorithms accessible to the public and farmers. Furthermore, efforts will be directed towards enhancing and making the "production mode" in which the developed AI models operate, more accessible and improved.



Work packages:

- (Kurze) Literaturübersicht & aktuelle Forschungstrends zu LLMs
- Überführen von Prognosemodellen in die Ausgaben von LLMs
- Erstellen eines digitalen Assistenten auf Basis von LLMs
- Überarbeiten der Monitoring Plattform

Requirements:

- (Good) knowledge in Python and Pytorch
- (Good) knowledge in machine learning
- Knowledge of server/web development
- Motivation for agricultural tasks

Contact:

Beginn summer 2024
By agreement

Please send a short mail with your motivation, CV and professional background to malte.von.bloh@tum.de

Supervisor:

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