

Summary of projects from shortlisted EuroTeQ Collider teams at TUM participating at the EuroTeQathon.

Challenge- Smart Grazing: How to make livestock production sustainable?

Team name - FarmElf

Challenge Collaborator - Prof. Mariana Rufino

Summary of the project - With the rise of livestock production, sustainability of the industry and the well-being of livestock have come into question. Our app aims to improve living conditions of the livestock itself by providing farmers a tool to monitor fields and give recommendations. The app uses data from satellites and drones with near infrared spectroscopy to calculate the energy content in the field. Through this method, it will be easier to monitor bigger fields in comparison to using ground sensors, which have low ground coverage. Combined with weather forecasting, this data is fed into a predictive model which recommends the farmer to cut the grass at the peak of its energy level. Therefore the livestock has better feed and in turn reduce their greenhouse gas emissions, protecting the environment.