

**Service ID** S00045

**Location** Austria



## Testing of the follow-me function of a robot

### Provider service

Josephinum Research (JR)

### Link to content

<https://agrifoodtef.eu/catalogue-of-services/testing-follow-me-function-robot>

### Type of Sector

Arable farming, Horticulture, Livestock farming, Tree Crops, Viticulture

### Accepted type of products

Physical system, Software or AI model

### Type of service

Collection of test data, Performance evaluation, Test design, Test execution, Test setup

### Description

Our service offers a comprehensive evaluation of your device's ability to detect and track moving objects like people, ensuring it performs reliably in real-world scenarios. Also, safety concerns of such a function can be addressed with our tests. Through field tests, we simulate realistic conditions to test your system under various environmental influences. This practical approach provides precise insights into your device's effectiveness and highlights areas for improvement, making it essential for startups and SMEs in the tech-agricultural sector aiming to refine their innovative solutions.

## **How can the service help you**

When programming a follow-me function, the goal is in the name: the robot must follow me. To address this demand, machine learning often is the tool of choice. The physical sensors behind the model are important too. We test the whole system in real field conditions to provide you with information about how many mistakes your robot makes under those conditions.

## **How the service will be delivered**

The test can be customised for different crops (viticulture, tree crops, open fields, etc.), different illuminations (dependent on weather), and different persons/scenarios (more than one person, persons with different clothing, etc.). It is also possible to split the test into object detection and the movements of the robot itself to identify any weak spots in your system.

## **Service customisation**

The testing can be repeated as often as agreed with the customer. The service can be delivered throughout the whole year. The execution of the test can be as short as a day, but the evaluation of the results will be at least two weeks. The service can be executed in our fields in Wieselburg, as well as in fields in your location. You will receive a report of the efficiency and safety of the follow-me function. You have to provide a robot or algorithm for object detection and the follow-me function.