

**Service ID** S00242

**Location** Remote, Spain



## **Performance testing of deep learning solutions**

### **Provider service**

University of Cordoba

### **Link to content**

<https://agrifoodtef.eu/services/performance-testing-deep-learning-solutions>

### **Type of Sector**

Arable farming, Food processing, Greenhouse, Horticulture, Livestock farming, Tree Crops, Viticulture

### **Accepted type of products**

Data, Software or AI model

### **Type of service**

Performance evaluation

### **Description**

This service evaluates the performance of deep learning algorithms to determine their efficiency and feasibility for migration to embedded devices. By leveraging high-performance computing (HPC) and GPU resources, this testing helps developers understand how well their algorithms perform in terms of speed, accuracy, and resource consumption. The service is particularly beneficial for applications in food processing, such as beekeeping and pollen counting, where real-time data processing is essential.

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

This service enables developers to optimise deep learning models for performance, particularly for applications that require deployment on resource-constrained embedded devices. It supports clients in identifying potential bottlenecks and improving model accuracy and speed, which are crucial for effective food processing applications.

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

Customisation options include targeted metrics (e.g., inference speed, accuracy) and specific hardware requirements. Clients may also specify performance thresholds related to their intended use cases, such as processing pollen data in real time.

## **Service customisation**

The service is conducted in Spain and involves performance testing on HPC and GPU platforms. Outputs include performance metrics, resource usage reports, and recommendations for model optimisation. Clients should provide deep learning models ready for evaluation and specify target metrics.