Evaluation of AI model for agrifood applications

Provider service

GRADIANT

Link to content

https://agrifoodtef.eu/services/evaluation-ai-model-agrifood-applications

Type of Sector

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

Accepted type of products

Data, Design / Documentation, Software or AI model

Type of service

Performance evaluation

Description

This service helps businesses and organisations evaluate how well their AI models perform in real-world conditions. We conduct thorough testing of your AI model using either your own dataset or our reference datasets, depending on your needs (see the related services). Our evaluation process goes beyond basic accuracy metrics to provide a comprehensive understanding of your model's strengths and limitations. We analyse various aspects of performance that matter for your specific use case, whether it's detecting diseases in crops, sorting produce, or monitoring livestock behaviour. We work with you to determine the most relevant performance metrics for your application, taking into consideration factors like accuracy, speed, reliability, and resource usage. This helps you understand if your AI solution is ready for deployment, needs improvement, or requires adjustments for specific conditions. The evaluation provides clear, actionable insights about your model's performance, helping you make informed decisions about its readiness for real-world agricultural applications.

How can the service help you

This service addresses a crucial challenge faced by companies developing AI solutions for agriculture: knowing whether their AI models are truly ready for real-world deployment. Before using our service, you may be uncertain about your model's actual performance capabilities and limitations.

You might have questions about how well it handles different scenarios, edge cases, or varying conditions typical in

How the service will be delivered

The service execution begins with an initial consultation to understand your AI model and specific evaluation needs. You'll need to provide us with your trained AI model and, if applicable, your dataset. If you're using TEF available datasets, we'll help you select the most appropriate ones for your use case.

Service customisation

The evaluation service can be tailored in several ways to match your specific needs. We can customise the evaluation metrics based on your application—for instance, if response time is critical for your use case, we can emphasise performance speed and latency measurements.