Service ID

S00258

Location

Remote

Model training of AI agrifood-related algorithms

Provider service

GRADIANT

Link to content

https://agrifoodtef.eu/services/model-training-ai-agrifood-related-algorithms

Type of Sector

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

Accepted type of products

Software or AI model

Type of service

AI model training

Description

The AI model training service in TEF infrastructure offers a powerful platform for developing cutting-edge artificial intelligence solutions in the agrifood sector. Leveraging high-performance computing resources, this service enables innovators to train AI models using diverse tabular data types. These include sensor readings (such as soil moisture, temperature, and nutrient levels), machine-generated data (from agricultural equipment and IoT devices), crop yield statistics, weather patterns, and supply chain metrics. Users can either provide their own datasets or utilise existing data within the TEF infrastructure (see Related Services). The service supports a wide range of AI frameworks and model architectures, allowing for flexible experimentation and rapid iteration. From predictive maintenance of farming equipment to optimising crop management practices, this platform accelerates the development of AI-driven solutions that address critical challenges in agriculture and food science, fostering innovation and efficiency in the industry.

How can the service help you

The AI model training service in TEF infrastructure addresses critical needs in the agrifood sector: it enables the improvement of existing AI models and provides the computational power to run existing algorithms at scale. Before using this service, customers may have developed algorithms but lack the computational capacity to train or run them effectively on large datasets. After utilizing this service, they can overcome these limitations.

How the service will be delivered

The AI model training service in TEF infrastructure is already available to execute. Customer requirements are initially captured in an interview (online or face to face) between the service provider and the customer. Then, we can set the time needed to execute it (from approximately one month to several weeks). The service is executed remotely in digital infrastructure located in Vigo (Spain) so the customers could access the service remotely regardless of their location. As a result, the customer will receive documentation about the training process, the AI model itself and a user manual to know how

Service customisation

As a generic example, a company that have developed a predictive system to assist farmers in some agrifood process can improve the system with new data using TEF infrastructure.