

Service ID S00065

Location Poland, Remote



Data validation and processing services

Provider service

Lukasiewicz Poznanski Instytut Technologiczny (L-PIT)

Link to content

<https://agrifoodtef.eu/catalogue-of-services/data-validation-and-processing-services>

Type of Sector

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

Accepted type of products

Data, Design / Documentation

Type of service

Collection of test data, Data analysis, Performance evaluation

Description

The service will provide validation and processing of data sets, in particular video data, coming from AI-based systems testing and/or digital measurement and data collection in cloud technologies. The scope of the proposed data validation will include, among other things, the service provider's activities of checking the presence of all data streams in the analysed image or video files, detecting any breaks in transmission, and checking the focus or exposure of the camera images. The next stage of the service will be the preparation of the material for evaluating the performance of AI-based technical systems under test, e.g., by formatting, identifying images containing selected visual markers, or linking images from a given system under test to data of other modalities.

How can the service help you

As part of the service, we provide general and technical support in carrying out analyses of the data held by the client, in particular in the form of images and videos. The scope of the proposed analyses leads to a broad validation of this data in terms of its suitability for use as machine learning material for the AI systems used by the company. The validation of the video material carried out as part of the service provision will also allow the client to obtain an assessment of the quality and suitability of this data for conducting performance evaluations of the technical systems under test based on AI solutions.

As part of the provision of the service, the service provider assumes the verification work consisting, e.g., of checking the presence of all data streams in the analysed images or videos, detecting any breaks in transmission, or checking the sharpness or exposure of images transmitted from cameras. Important elements of the proposed service are also activities that allow us to perform formatting processes, identify images containing selected visual markers, or be able to associate the images obtained thanks to AI from the system under test with real images or data of other modalities. These activities will allow the improvement of AI systems for the areas of agriculture and food processing as a result of improving the quality of the data used to conduct machine learning of AI systems.

How the service will be delivered

As part of the service, we offer analyses allowing for the validation of data collected from ongoing research, testing of AI-based systems, and/or digital measurements of the performance of tested objects, in particular vision data. We also offer an assessment of the quality and suitability of this data for conducting performance evaluations of the AI-based technical systems under test. In order for the service to be properly performed, the customer must provide full access to the relevant data as well as documentation. All information is treated confidentially, with the option to sign a Non-Disclosure Agreement (NDA). If the tests need to comply with specific industry standards or regulations, kindly inform us in advance. The timeframe and costs are determined individually based on the scope and complexity of the analyses or tests performed. We ensure flexibility and professional support at every stage of the testing process. Please feel free to contact us to discuss the details and tailor the service to your unique needs.

Service customisation

Our service to perform validation and processing of data is based on a structured workflow. It is an integral part of the service to perform an assessment of the quality and suitability of the data to guide the performance evaluation of the AI-based technical systems under test. The time, duration, and other details of the process can be adjusted according to the characteristics of a problem at hand and specific customer needs. The customer needs to provide the data to be validated. The process is flexible and tailored to specific needs, ensuring professionalism and commitment at every stage of our collaboration. As a result, the customer will obtain the detailed report from the analyses conducted together with the data validated and processed as needed.