Designing and Enabling E-infrastructures for intensive Processing in a Hybrid DataCloud

Supporting artificial intelligence (machine learning and deep learning), parallel post-processing of very large data, and analysis of massive online data streams over distributed e-Infrastructures in the European Open Science Cloud (EOSC)

This project has received funding from the European Union's Horizon 2020 research and innovation programme under grant agreement No 777435

www.deep-hybrid-datacloud.eu
The collection of Use Cases in the DEEP-HybridDataCloud project have been chosen from several communities and different scientific disciplines. They provide a relevant sample of demanding requirements for the DEEP as a Service Platform.

**GOALS**

The goal of the project is to prepare a new generation of e-infrastructures that harness latest generation technologies, supporting machine learning and deep learning. The project provides the corresponding services to lower the adoption barriers for new communities and users, satisfying the needs of both research, education communities and citizen science.

**SERVICE CYCLE**

The Deep-Hybrid-DataCloud project provides services that allow scientists to:

- **Build a machine learning** from scratch or using an existing one
- **Train, test and evaluate** a model
- **Easily** deploy a module and **serve it as a service**
- **Share** and **publish** a model

**GET ACCESS**


**OPEN CATALOG**

DEEP-Hybrid-DataCloud is a project that aims to deliver a framework to easily develop Machine Learning and Deep Learning modules on top of e-Infrastructures.

In the DEEP Open Catalog you can find ready to use modules in a variety of domains. These modules can be executed on your local laptop, on a production server or on top of e-Infrastructures supporting the DEEP-Hybrid-DataCloud stack. [https://marketplace.deep-hybrid-datacloud.eu](https://marketplace.deep-hybrid-datacloud.eu)

**USE CASES**

The collection of Use Cases in the DEEP-HybridDataCloud project have been chosen from several communities and different scientific disciplines. They provide a relevant sample of demanding requirements for the DEEP as a Service Platform.

- **Lattice QCD for massive data analysis**
- **Massive Online Data Streams**
- **Plant Classification with Deep Learning**
- **Diabetic Retinopathy Detection**
- **Deep Learning application for monitoring through satellite imagery**