

DEEPHEALTH



DL & HPC for biomedical image applications

Project Type: H2020 IA

Year: 2019-2022

Solution

Location: EU

Global 14 642 324 NTTData 741 697

Business need

Put High Performance Computing power at the service of biomedical applications with DL needs and, through an interdisciplinary approach.

Apply DL techniques on large and complex image biomedical datasets to support new and more efficient ways of diagnosis, monitoring and treatment of diseases. DEEPHEALTH, a H2020 European innovation Project that aims a unified framework adapted to exploit underlying heterogeneous HPC and Big Data architectures and assembled with state-of-the-art techniques in Deep Learning and Computer Vision for facilitating the daily work of expert users to to boost new and more efficient biomedical image applications for the diagnose, monitoring and treatment of diseases.

Outcomes

The DeepHealth toolkit consisting of:

- The European Distributed Deep Learning Library (**EDDLL**): open sourcelibrary ready to run DL algorithms on Hybrid HPC + Big Data architectures providing all required functionalities in relation to DL and biomedical images.
- European Computer Vision Library (ECVL) to facilitate the integration and exchange of data between Computer Vision and Image Processing libraries.
- **Front-end** for facilitating the use of EDDLL and ECVL.



