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

Resultados

Información del proyecto

DEEP-HybridDataCloud

Identificador del acuerdo de subvención:
777435

DOI
10.3030/777435

Proyecto cerrado

Fecha de la firma de la CE
31 Octubre 2017

Fecha de inicio
1 Noviembre 2017

Fecha de finalización
30 Abril 2020

Financiado con arreglo a
EXCELLENT SCIENCE - Research Infrastructures

Coste total
€ 2 988 750,00

Aportación de la UE
€ 2 988 750,00

Coordinado por
AGENCIA ESTATAL CONSEJO SUPERIOR DE INVESTIGACIONES CIENTIFICAS
España

CORDIS proporciona enlaces a los documentos públicos y las publicaciones de los proyectos de los programas marco HORIZONTE.

Los enlaces a los documentos y las publicaciones de los proyectos del Séptimo Programa Marco, así como los enlaces a algunos tipos de resultados específicos, como conjuntos de datos y «software», se obtienen dinámicamente de OpenAIRE.

Resultado final

Documentos, informes (23)

Intermediate Status Report about Use Cases
Intermediate Status Report about use case integration and Devops methods

Available Technologies for accelerators and HPC
Assessment of available technologies for supporting accelerators and HPC, initial design and implementation plan (all tasks)

Final Report about Use Case integration
Final Report about use case integration

Consolidated reports from global DEEP meetings.

First prototype of the DEEP as a Service
First prototype implementation of the DEEP as a Service solution

Pilot testbed
Pilot testbed and integration architecture with EOSC large scale infrastructures

Final implementation of software platform for accessing accelerators and HPC

First Software Platform
First implementation of software platform for accessing accelerators and HPC

Implementation of Dissemination and Exploitation Report.

Design for the DEEP as a Service solution
Design document and work plan for the DEEP as a Service solution

Definition of the Architecture of the Hybrid Cloud
Definition of the architecture of the High Level Hybrid Cloud

Updated Dissemination and Exploitation Plan.

Initial plan for Use Cases
Initial Plan on the selection of use cases and the strategy for the devops pipelines.

High Level Hybrid Cloud solutions prototype
High Level Hybrid Cloud solutions prototype completed

Updated reports from global DEEP meetings.

Final Report on Dissemination and Exploitation.

Final report on EOSC integration and software management activities

Communication Measures: Plan and Implementation Status.

State-of-the-art on Machine Learning frameworks

State-of-the-art Deep Learning (DL), Neural Network (NN) and Machine Learning (ML) frameworks and libraries.

Final release of High Level Hybrid Cloud

Final release of High Level Hybrid Cloud solutions completed and deployed

Dissemination and Exploitation Plan.

Status of Software releases

Final implementation of the DEEP as a Service solution

Report on the final implementation of the DEEP as a Service solution.

Open Research Data Pilot (1)

Data Management considerations and initial plan

This deliverable will analyze the implications of existing Data Management Plans for the different datasets in the Case Studies, and how the derived data should be considered in the corresponding data life cycle.

Publicaciones

Libros monográficos (1)

A set of common software quality assurance baseline criteria for research projects

Autores: Orviz, Pablo; López García, Álvaro; Duma, Doina Cristina; Donvito, Giacinto; David, Mario; Gomes, Jorge

Publicado en: Edición 1, 2018
Editor: N/A

Artículos arbitrados (11)

An Information-centric Approach for Slice Monitoring from Edge Devices to Clouds
Autores: Binh Minh Nguyen, Huan Phan, Duong Quang Ha, Giang Nguyen
Publicado en: Procedia Computer Science, Edición 130, 2018, Página(s) 326-335, ISSN 1877-0509
Editor: Elsevier
DOI: 10.1016/j.procs.2018.04.046

A heuristics approach to mine behavioural data logs in mobile malware detection system
Autores: Giang Nguyen, Binh Minh Nguyen, Dang Tran, Ladislav Hluchy
Publicado en: Data & Knowledge Engineering, Edición 115, 2018, Página(s) 129-151, ISSN 0169-023X
Editor: Elsevier BV
DOI: 10.1016/j.datak.2018.03.002

A Multivariate Fuzzy Time Series Resource Forecast Model for Clouds using LSTM and Data Correlation Analysis
Autores: Nhuan Tran, Thang Nguyen, Binh Minh Nguyen, Giang Nguyen
Publicado en: Procedia Computer Science, Edición 126, 2018, Página(s) 636-645, ISSN 1877-0509
Editor: Elsevier
DOI: 10.1016/j.procs.2018.07.298

Machine Learning and Deep Learning frameworks and libraries for large-scale data mining: a survey
Autores: Giang Nguyen, Stefan Dlugolinsky, Martin Bobák, Viet Tran, Álvaro López García, Ignacio Heredia, Peter Malík, Ladislav Hluchý
Publicado en: Artificial Intelligence Review, 2019, ISSN 0269-2821
Editor: Kluwer Academic Publishers
DOI: 10.1007/s10462-018-09679-z

Deep learning for weed identification based on seed images
Autores: Francisco Pando, Ignacio Heredia, Carlos Aedo Pérez, Mauricio Velayos Rodríguez, Lara Lloret Iglesias, Joel Calvo
Publicado en: Biodiversity Information Science and Standards, Edición 2, 2018, Página(s) e25749, ISSN 2535-0897
Editor: Pensoft
DOI: 10.3897/biss.2.25749

Convolutional Neural Networks for Phytoplankton identification and classification
Autores: Lara Lloret, Ignacio Heredia, Fernando Aguilar, Elisabeth Debusschere, Klaas Deneudt, Francisco Hernandez
Publicado en: Biodiversity Information Science and Standards, Edición 2, 2018, Página(s) e25762, ISSN 2535-0897
Editor: Pensoft
DOI: 10.3897/biss.2.25762

New Method for Constructing a Visibility Graph-Network in 3D Space and a New Hybrid System of Modeling
Autores: Matej Babič, Ladislav Hluchy, Peter Krammer, Branko Matovič, Ravi Kumar, Pavel Kovač
Publicado en: Computing and Informatics, Edición 36/5, 2017, Página(s) 1107-1126, ISSN 1335-9150
Editor: Slovak Academic Press Ltd.
DOI: 10.4149/cai_2017_5_1107

Estimation of high frequency nutrient concentrations from water quality surrogates using machine learning methods
Autores: María Castrillo, Álvaro López García
Publicado en: Water Research, Edición 172, 2020, Página(s) 115490, ISSN 0043-1354
Editor: Elsevier BV
DOI: 10.1016/j.watres.2020.115490

A workbench for species identification based on images and deep learning techniques
Autores: Ignacio Heredia, Lara Lloret, Jesús Marco, Francisco Pando
Publicado en: Proceedings of TDWG, Edición 1, 2017, Página(s) e20569, ISSN 2535-0897
Editor: Pensoft
DOI: 10.3897/tdwgproceedings.1.20569

A Cloud-Based Framework for Machine Learning Workloads and Applications
Autores: Alvaro Lopez Garcia, Viet Tran, Andy S. Alic, Miguel Caballer, Isabel Campos Plasencia, Alessandro Costantini, Stefan Dlugolinsky, Doina Cristina Duma, Giacinto Donvito, Jorge Gomes, Ignacio Heredia Cacha, Jesus Marco De Lucas, Keiichi Ito, Valentin Y. Kozlov, Giang Nguyen, Pablo Orviz Fernandez, Zdenek Sustr, Pawel Wolniewicz, Marica Antonacci, Wolfgang Zu Castell, Mario David, Marcus Hardt, Lara
Publicado en: IEEE Access, Edición 8, 2020, Página(s) 18681-18692, ISSN 2169-3536
Editor: Institute of Electrical and Electronics Engineers Inc.
DOI: 10.1109/ACCESS.2020.2964386

DEEPaaS API: a REST API for Machine Learning and Deep Learning models

Autores: Álvaro López García
Publicado en: Journal of Open Source Software, Edición 4/42, 2019, Página(s) 1517, ISSN 2475-9066
Editor: NumFocus
DOI: 10.21105/joss.01517

Actas de congresos (4)

DEEP-HybridDataCloud

Autores: Donvito, Giacinto; Gomes, Jorge; Ferrer, A. Juan; Kozlov, Valentin; López García, Álvaro; Matyska, Ludek; Meyer, Norbert; Moltó, Germán; Tran, Viet; Castell, Wolfgang zu
Publicado en: ISC High Performance Computing, 2018
Editor: ISC High Performance Computing

DEEP: Hybrid Approach for Deep Learning

Autores: Alic, Andy S.; Antonacci, Marica; Caballer, Miguel; Campos, Isabel; Costantini, Alessandro; David, Mario; Dlugolinsky, Stefan; Donvito, Giacinto; Duma, Cristina; Gomes, Jorge; Hardt, Marcus; Heredia, Ignacio; Hluchy, Ladislav; Ito, Keiichi; Kozlov, Valentin; Lloret, Lara; López García, Alvaro; Marco, Jesus; Matyska, Ludek; Moltó, Germán; Nguyen, Giang; Orviz, Pablo; Plociennik, Marcin; Šustr,
Publicado en: 2019
Editor: ISC

Remote Sensing Data Analytics with the Udocker Container Tool using Multi-GPU Deep Learning Systems

Autores: Cavallaro, Gabriele; Kozlov, Valentin; Götz, Markus; Riedel, Morris
Publicado en: Proc. of the 2019 conference on Big Data from Space (BiDS'2019), EUR 29660 EN, ISBN 978-92-76-00034-1, doi:10.2760/848593
Conference on Big Data from Space (BiDS'19), Munich, Germany, 2019-02-19 - 2019-02-21, Edición 19, 2019, ISBN 978-92-76-00034-1
Editor: Publications Office of the European Union
DOI: 10.2760/848593

Rootless Containers with Udocker

Autores: Gomes, Jorge; David, Mário; Martins, João Paulo; Pina, João; Campos, Isabel; López Garcia, Alvaro; Orviz, Pablo; Kozlov, Valentin

Publicado en: ISC High Performance (2019), Edición 7, 2019
Editor: ISC

Capítulos de libros (1)

Benchmarking Deep Learning Infrastructures by Means of TensorFlow and Containers
Autores: Adrian Grupp, Valentin Kozlov, Isabel Campos, Mario David, Jorge Gomes, Álvaro López García
Publicado en: High Performance Computing - ISC High Performance 2019 International Workshops, Frankfurt, Germany, June 16-20, 2019, Revised Selected Papers, Edición 11887, 2019, Página(s) 478-489, ISBN 978-3-030-34355-2
Editor: Springer International Publishing
DOI: 10.1007/978-3-030-34356-9_36

Conjuntos de datos

Conjuntos de datos vía OpenAIRE (1)

Aggregated network monitoring data
Autores: Dlugolinsky, Stefan; Tran, Viet; Nguyen, Giang
Publicado en: CSIC-UC - Instituto de Física de Cantabria (IFCA)

Software

Software a través de OpenAIRE (11)

Liquid volume estimation from RGB images
Autores: Cobo Cano, Miriam
Editor: Digital.CSIC
DOI: 10.20350/digitalcsic/14025; 10261/254875

Tensorflow image classification

Autores: Heredia, Ignacio
Editor: Digital.CSIC
DOI: 10.20350/digitalcsic/8597; 10261/173352

Massive Online Data Streams (MODS)
Autores: Dlugolinsky, Stefan; Tran, Viet; Nguyen, Giang
Editor: CSIC-UC - Instituto de Física de Cantabria (IFCA)
DOI: 10261/192888

Image classification engine
Autores: Heredia, Ignacio
DOI: 10261/194498

indigo-dc/DEEPaaS 0.1.0
Autores: López García, Álvaro; Orviz, Pablo
DOI: 10261/173108

Plants classification engine
Autores: Heredia, Ignacio; Lloret Iglesias, Lara
DOI: 10261/194545

Phytoplankton classification engine
Autores: Lloret Iglesias, Lara; Céspedes Sisniega, Jaime; Heredia, Ignacio
DOI: 10261/194553

Conus classification engine
Autores: Lloret Iglesias, Lara; Heredia, Ignacio
DOI: 10261/194548

Seeds classification engine
Autores: Heredia, Ignacio; Lloret Iglesias, Lara
DOI: 10261/194549

DEEPaaS API: a REST API for Machine Learning and Deep Learning models
Autores: Alvaro Lopez Garcia
Editor: Zenodo
DOI: 10.5281/zenodo.3386128; 10.5281/zenodo.3519350

Mostrando 1-10 de 11

Ver todos 11 los resultados

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