Publications

Journal Publications

- 2024 - Improving detection of asphalt distresses with deep learning-based diffusion model for intelligent road maintenance
- 2024 - Frouros: An open-source Python library for drift detection in machine learning systems
- 2024 - An end-to-end computer vision system based on deep learning for pavement distress detection and quantification
- 2023 - Novel deep learning method for coronary artery tortuosity detection through coronary angiography
- 2023 - Forecasting COVID-19 spreading through an ensemble of classical and machine learning models: Spain's case study
- 2023 - Deep learning based soft-sensor for continuous chlorophyll estimation on decentralized data
- 2023 - A deep learning model for prognosis prediction after intracranial hemorrhage
- 2022 - Structural brain alterations associated with suicidal thoughts and behaviors in young people: results from 21 international studies from the ENIGMA Suicidal Thoughts and Behaviours consortium
- 2022 - Rationale and design of the brain magnetic resonance imaging protocol for FutureMS: a longitudinal multi-centre study of newly diagnosed patients with relapsing-remitting multiple sclerosis in Scotland
- 2022 - A Python library to check the level of anonymity of a dataset
- 2022 - A mathematical justification for metronomic chemotherapy in oncology
- 2022 - A first update on mapping the human genetic architecture of COVID-19
- 2020 - Software Quality Assurance in INDIGO-DataCloud project: a converging evolution of software engineering practices to support European Research e-Infrastructures
- 2020 - Estimation of high frequency nutrient concentrations from water quality surrogates using machine learning methods
- 2020 - Deep learning for proactive network monitoring and security protection
- 2020 - DEEPaaS API: a REST API for machine learning and deep learning models
- 2020 - DataCloud infrastructure to manage FAIR environmental data
- 2020 - A cloud-based framework for machine learning workloads and applications
- 2019 - Open is not enough
- 2019 - Machine Learning and Deep Learning frameworks and libraries for large-scale data mining: a survey
- 2019 - An efficient cloud scheduler design supporting preemptible instances
- 2018 - umd-verification: Automation of Software Validation for the EGI Federated e-Infrastructure
- 2018 - Resource Provisioning in Science Clouds: requirements and challenges
- 2018 - Orchestrating Complex Application Architectures in Heterogeneous Clouds
- 2018 - INDIGO-DataCloud: a Platform to Facilitate Seamless Access to E-Infrastructures
- 2018 - Enabling rootless Linux Containers in multi-user environments: the udocker tool
- 2016 - Standards for enabling heterogeneous IaaS cloud federations
- 2016 - ooi: OpenStack OCCI interface
- 2016 - Efficient image deployment in cloud environments
- 2015 - The EGI Federated Cloud e-Infrastructure
- 2014 - Validation of Grid Middleware for the European Grid Infrastructure
- 2013 - Phenomenology Tools on Cloud Infrastructures using OpenStack
- 2013 - Approaches to Distributed Execution of ScientificWorkflows in Kepler
- 2012 - Software Provisioning process for EGI
- 2012 - Integrating PROOF Analysis in Cloud and Batch Clusters
- 2012 - Grid Engine batch system integration in the EMI era
- 2012 - Fostering multi-scientific usage in the Iberian production infrastructure
- 2010 - XMM–Newton Data Analysis with SAS Software Over GRID Technology
- 2008 - Workflow-based data parallel applications on the EGEE production grid infrastructure
- 2008 - The interactive European grid: Project objectives and achievements
- 2008 - A Grid infrastructure for parallel and interactive applications
- 2007 - A high availability solution for GRID services

Conferences

- Conference Publications

- 2023 - Comparison of machine learning models applied on anonymized data with different techniques

- 2021 - On the use of Deep Generative Models for ”Perfect” Prognosis Climate Downscaling
- 2017 - Large Scale Plant Classification with Deep Neural Networks
- 2017 - Improved Cloud resource allocation: how INDIGO-DataCloud is overcoming the current limitations in Cloud schedulers
- 2016 - Evolution of the open cloud computing interface
- 2014 - The role of IBERGRID in the Federated Cloud of EGI
- 2013 - Identity Federation with VOMS in Cloud Infrastructures
- 2013 - Analysis of Scientific Cloud Computing requirements
- 2012 - Production change management using Puppet, Git, Jenkins and Gerrit
- 2012 - IberCloud: federated access to virtualized resources
- 2011 - Software Provision Process for EGI
- 2011 - Fostering multi-scientific usage in the Iberian production infrastructure
- 2011 - Focusing on an integrated computing infrastructure: the IFCA experience
- 2011 - Experience on running the Ibergrid infrastructure within EGI
- 2010 - Virtualization and network mirroring to deliver High Availability to Grid services
- 2010 - Provisioning of Grid Middleware for EGI in the framework of EGI-InSPIRE
- 2010 - Int.eu.grid
- 2010 - Ibergrid transition to EGI

Conference Presentation

- 2024 - Federated AI in the European Open Science Cloud
- 2022 - FAIRness Evaluation, Validation and Advising with FAIR EVA
- 2022 - FAIR EVA: Evaluator, Validator & Advisor
- 2022 - FAIR EVA: Checking data FAIRness in data repositories
- 2022 - Deep learning to estimate wine volume from one single-view image
- 2022 - Artificial Intelligence to evaluate the impact of COVID-19 disease on the elderly
- 2018 - Convolutional Neural Networks for Phytoplankton identification and classification
- 2017 - A workbench for species identification based on images and deep learning techniques

Conference Posters

- 2023/07 - Deep learning to detect coronary artery tortuosity in coronary angiography
- 2023/07 - Application of federated learning to medical imaging scenarios
- 2023/05 - Reliable machine learning algorithms for medical imaging
- 2023/05 - Privacy preserving techniques for data science
- 2022/09 - pyCANON: A Python library to check the level of anonymity of a dataset
- 2022/09 - Frouros: A Python library for drift detection in Machine Learning problems
- 2022/06 - SQAaaS - Ensuring Software, Service and Data quality automatically in open repositories
- 2019/04 - Deep Learning techniques for Satellite data: Atmospheric Corrections
- 2019/04 - Deep Learning as a Service for Satellite Imagery Super-resolution
- 2013/10 - Experience with a frozen computational framework from LEP age

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Books

- 2023 - Inteligencia Artificial y Medicina