Publications

Journal Publications

- 2024 Improving detection of asphalt distresses with deep learning-based diffusion model for intelligent road maintenance
- 2024 An end-to-end computer vision system based on deep learning for pavement distress detection and quantification
- 2023 Deep learning based soft-sensor for continuous chlorophyll estimation on decentralized data
- 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 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 laaS 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
- · 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
- 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



- 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
- 2022/09 pyCANON: A Python library to check the level of anonymity of a dataset
- 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

Books