

# Advanced Computing and e-Science Group



Welcome to the Advanced Computing and e-Science group web portal within the [IFCA](#). We are part of a joint research center between the [Spanish National Research Council \(CSIC\)](#) and the [University of Cantabria \(UC\)](#), offering "enhanced" Science (or e-Science) to the researchers, where they can interact through the network, sharing computing resources to support their larger needs for simulation, data storage and transfer, analysis, and collaborative work.

Our research efforts are focused on:

- [Cloud Computing](#)
- [Data preservation](#)
- [Grid Computing](#)
- [High Performance Computing](#) (Altamira Supercomputing Node)

## Master on Data Science

- Joint University of Cantabria / UIMP master with the support of CSIC
- More Information in [masterdatascience.ifca.es](https://masterdatascience.ifca.es)

## General Information for Users:

- Information for users can be found at the [User Reference](#).
- Access to the Support ticket system: <https://support.ifca.es>

## Other information:

- How to get to our center ([IFCA in Santander, Spain](#))

### Collaboration Spaces



- [AI4EOSC](#) - This is the main collaboration space for the AI4EOSC project.
  - How to get access? Login with "AI4EOSC SSO" provider button. If you do not have a password, please request a new one in the login page.



- [SIESTA](#) - This is the main collaboration space for the SIESTA project.
  - How to get access? Login with "SIESTA SSO" provider button. If you do not have a password, please request a new one in the login page.



## Certifications

ISO 9001:2015  
ISO 27001:2017  
ENS - Esquema Nacional de Seguridad

## Last 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