

Introducing SAFEXPLAIN: Trustworthy AI through Deep Learning solutions that meet European Safety Standards for Industry

Barcelona, 18 October 2023—The newly released video from the EU-funded [SAFEXPLAIN](#) project explains how it tackles safety and explainability challenges associated with the use of deep learning (DL) solutions in critical autonomous systems, like cars, trains and satellites.

Autonomous systems require advanced software functionalities, like object detection, tracking and prediction, which can only be handled by DL solutions. However, these solutions are inherently at odds with functional safety requirements because they lack transparency and explainability.

SAFEXPLAIN digitizes and tailors DL solutions to the certification and qualification needs of different industrial domains to ensure the safety of these new solutions and to facilitate their uptake. The project integrates explainable DL solutions into a toolset and platform that are then tested and evaluated by the project's [automotive](#), [rail](#) and [space](#) case studies.

In the video, [Jaume Abella](#), SAFEXPLAIN coordinator, and CAOS Group Manager at the Barcelona Supercomputing Center-Centro Nacional de Supercomputación, highlights the project's commitment to ensuring that DL solutions align with the specific certification and qualification requirements of diverse industries. He emphasizes:

'customizing and digitizing deep learning solutions lets us guarantee that our solutions are explainable, trustworthy and that they meet the strict safety standards for use in European industries.'



Video frame from the interview with SAFEXPLAIN coordinator, Jaume Abella.

Watch the video at <https://www.youtube.com/watch?v=9iHTkDNUOL4>.

About SAFEXPLAIN

The [SAFEXPLAIN](#) (Safe and Explainable Critical Embedded Systems based on AI) is a HORIZON Research and Innovation Action financed under grant agreement 101069595. The project began on 1 October 2022 and will end in September 2025. The project is formed by an inter-disciplinary consortium of six partners coordinated by the [Barcelona Supercomputing Center](#) (BSC). The consortium is composed of three research centers, [RISE](#) (Sweden; AI expertise), [IKERLAN](#) (Spain; FUSA and railway expertise) and BSC (Spain; platform expertise) and three industries with critical autonomous AI-based systems, [NAVINFO](#) (Netherlands; automotive), [AIKO](#) (Italy; space), and [EXIDA DEV](#) (Italy; FUSA and automotive).

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