

AI4CAM: Trustworthy AI for CCAM

Description

Keeping in mind the potential opportunities, risks and limitations offered by Artificial Intelligence (AI), AI4CCAM will develop an open environment for integrating trustworthy-by-design AI models of vulnerable road user behaviour anticipation in urban traffic conditions to ensure improved road safety and user acceptance.

Leveraging the Trustworthy AI guidelines for general intelligent software systems and the ethics recommendations for connected automated vehicles, AI4CCAM will support AI-based scenarios management in which pedestrian/cyclist behaviour anticipation models will integrate visual gaze estimation and where explainable ego car trajectory prediction models are simulated with ethical dilemmas and multiplied with generative adversarial networks and metamorphic testing techniques.

The AI4CCAM open environment will include an interoperable digital framework for managing and generating AI-based urban-traffic scenarios in which trustworthy-by-design AI models can be tested and an online participatory space to foster acceptance of AI in automated driving, determine AI risks and identify biases in datasets and cyberthreats. Simulation scenarios of road users interacting with automated vehicles will be developed and evaluated in three complementary use cases covering the whole sense-plan-act paradigm and user acceptance. As such, the project will advance knowledge in building trustworthy-by-design AI-based solutions for CCAM applications.

Barcelona Supercomputing Center - Centro Nacional de Supercomputación

Source URL (retrieved on 18 Abr 2024 - 14:32): <https://www.bsc.es/es/research-and-development/projects/ai4cam-trustworthy-ai-ccam>