

TRUSTWORTHY AI IN SAFETY CRITICAL SYSTEMS

OVERCOMING ADOPTION BARRIERS

23 SEPTEMBER 2025 | BARCELONA, SPAIN

UNIVERSITAT POLITECNICA DE CATALUNYA- CAMPUS NORD

TIME	SESSION
9:00	Registration - Sala Master
9:45	<p>Panel session: Challenges to AI adoption in Safety Critical Systems Moderated by Irune Agirre (IKERLAN)</p> <p>Jaume Abella (Barcelona Supercomputing Center), Michel Barreteau (THALES cortAIx Labs), Mohammed Abuteir (TTTech Auto)</p>
11:00	Coffee Break and Poster Session ^a
11:30-13:00	<p>SAFEXPLAIN/ EdgeAI-Trust- Sala Master</p> <ul style="list-style-type: none">11:30 Safety-relevant AI development process and software architecture (Javier Fernández, IKERLAN)11:50 AI explainability solutions to build safety-relevant AI-based software architectures (Thanh Bui, RISE-Research Institutes of Sweden)12:10 Platform support to enable safety-relevant AI-based systems (Enrico Mezzetti, Barcelona Supercomputing Center)12:30 Applying reference safety architecture patterns to decentralized edge AI systems in EdgeAI-Trust (Francisco J. Cazorla, Barcelona Supercomputing Center)12:45 Leveraging SAFEXPLAIN solutions for distributed AI in EdgeAI-Trust (Carlo Donzella, exida development) <p>ULTIMATE - Sala Agora</p> <ul style="list-style-type: none">11:30 End-to-end Trustworthy AI (incl. Ethics) approach (N. Quintano, Tecnalia / I. Marsh, CBRNE Ltd)12:00 Satellite Use Case<ul style="list-style-type: none">Problem (A. Giovannini, Thales Alenia Space)Hybrid AI solution (N. Bastianello, KTH / E. Goudout, Thales cortAIx Labs)Algorithm evaluation (M. San Miguel, Tecnalia / E. Glize, Thales Alenia Space / D. Longuet, Thales cortAIx Labs)Demonstrator, results and impacts (A. Giovannini, Thales Alenia Space)
13:00	Lunch
14:00-16:00	<p>SAFEXPLAIN</p> <p>AI-based safety-critical systems: from demo to space, railway and automotive applications</p> <ul style="list-style-type: none">Space case (Gabriele Giordana, AIKO)Automotive case (Frank Geulen/ Lucas Tosi , NAVINFO Europe)Rail case (Joanes Plazaola, IKERLAN) <p>ULTIMATE - Sala Agora</p> <p>14:00 Robotic workshop Use Case</p> <ul style="list-style-type: none">Problem (S. Bus, PIAP)Hybrid AI solution, (R. Kozik, ITTI)Algorithm evaluation (R. Kozik, ITTI/ D. Caon, LNE)Demonstrator, Results & impacts (S. Bus, PIAP) <p>15:00 Industrial mobile manipulators Use Case</p> <ul style="list-style-type: none">Problem (M. Bosch, Robotnik)Hybrid AI solution (K. Chandramouli, CBRNE Ltd / M. Tiemann, Innova Integra Ltd)Algorithm evaluation (D. Caon, LNE/ C. Alonso, Tecnalia)Demonstrator (M. Bosch, Robotnik / K. Chandramouli, CBRNE Ltd)Results, impacts (M. Bosch, Robotnik)
16:00	Coffee Break and Poster Session ^a
16:30	What's next for AI in safety-critical systems: Insights and the road ahead

^aPosters by: CAPSULIA - Encapsulation Of AI-Based Solutions To Accelerate Their Adoption
EdgeAI-Trust - Decentralized Edge Intelligence: Advancing Trust, Safety, and Sustainability in Europe
SMARTY: Scalable and Quantum Resilient Heterogeneous Edge Computing enabling TrustworthyAI
PQC4eMRTD: Post-Quantum Cryptography for electronic Machine-Readable Travel Documents

*BSC will assume the costs of coffee breaks and lunch for each of the attendees. As such, said attendees agree to renounce the corresponding per diem expenses.