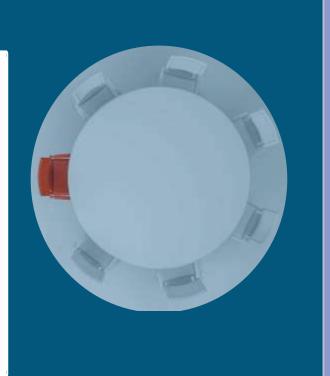


Introduction:





Guillermo Cabezas
Building and Infrastructure
guicab@cartif.es

Anibal Reñones Industry 4.0 aniren@cartif.es

Fundación CARTIF (ES-RTO)







Computer vision

Operator pose identification, object detection classification, operator mood

Collaborative robotics

Complex picking, products dismantling, palletizing, 3D printing

Human-robot interaction

Multimodal interaction Speech, gestures, vision ...

GenAl

Robot interaction Fine-tuning of foundational models (NLP, scene recognition, ...)



Challenge to address in the pilot



Idea1: XR-Guided Adaptative Disassembly Assistant

- ☐ Extended Reality (XR)
- ☐ AI-powered decision support



Idea2: Voice-Guided Robotic coordination

- ☐ Warehouse workers interacting via natural language commands
- ☐ Robots with more flexibility



Idea3: Explainable AI for Human-In-the-Loop Quality Control

- Workers and AI collaborate in decision making
- ☐ Robot mechanical actions

What partner(s) are you seeking?



- Technology Adopter (End-user)
- Technology Developer/Integrator (SME or start-up).
- We offer extensive <u>experience in robotics</u> technology development and <u>European projects execution and</u> <u>management</u>