MASTER

MASTER 2nd Open Call Winners:
Advancing XR Solutions for the Future of Industrial Training

Discover the 24 projects selected through MASTER's 2nd Open Call, showcasing innovative uses of extended reality, artificial intelligence and robotics for education, training and industrial applications.

AIR-XR
A VR training application that uses a digital twin of a collaborative robot to help learners safely build practical industrial robotics skills.

AIXRIG
Enables the rapid creation of mixed reality training applications by automatically generating immersive tutorials from a single expert demonstration using AI.

AI-XRobo
Empowers trainees to understand and train ML-driven industrial robots through a hands-on, gamified VR environment where users control the entire learning process.

ARCHIVE
An XR training platform that enables learners to practise industrial robotics and ROS programming safely and affordably through a gamified VR environment.

CoBotXpeRience
Delivers immersive XR training that enables non-experts to learn intuitive and safe collaborative robot programming.

EMPAIRED
Enhances ergonomic education through an inclusive XR training experience featuring an AI-powered virtual human with voice interaction and emotion recognition.

Ergon-Pick
Delivers ergonomics-focused XR training that prepares workers to collaborate safely and healthily with robots in automated picking lines.

FARMTRON-XR
Provides immersive XR training for the maintenance of agricultural robots, enabling safe, hands-on learning for precision farming environments.

HRC-XR Trainer
Delivers immersive XR learning experiences that teach safe, ethical and ergonomic human–robot collaboration.

ICETeachXR
Uses a VR-enhanced industrial digital twin to design and evaluate immersive learning activities for advanced computer engineering education.

REACH-NEXT
Combines XR and robotics to deliver scalable, modular training solutions that support flexible and efficient industrial assembly processes.

RoboXR
Provides immersive XR training that enables learners to practise realistic robotic machine tending and industrial automation tasks safely.

RobWIQ-XRT

An immersive VR training module that uses AI-powered simulation to teach robotic weld inspection safely and effectively.

SkillXR

Delivers immersive, multi-modal XR training for forklift and reach truck operations, bridging theory and real-world skills through realistic simulation.

SMART-XR

Delivers progressive XR-based training that builds industrial robotics skills from basic automation to advanced robot configuration and control.

TI-RAX

Uses AI and extended reality to create scalable training scenarios that prepare learners for safe and effective human–robot collaboration.

TRiFlex-C

Uses AI and extended reality to create scalable training scenarios that prepare learners for safe and effective human–robot collaboration.

TRUST

Uses perspective-switching VR training to help learners build appropriate trust in robot-assisted quality inspection systems.

VIRAMM

An XR-based virtual learning factory that enables collaborative training and optimisation of manufacturing processes with digital robots.

X-HRC

An immersive XR learning experience that makes human–robot collaboration accessible and understandable for non-expert audiences.

XR-GRIT

A gamified VR training platform that combines immersive robotics simulation with narrative-driven missions to support workforce upskilling.

X-MAIN

An XR-based simulator that enables safe, immersive training for robotic maintenance, inspection and troubleshooting without physical equipment.

XRplained

Uses immersive XR teaching modules to help university students intuitively understand robot reference frames and kinematics.

XR-SHIELDS

An XR-based training programme that helps factory planners and safety engineers design safe and ergonomic human–robot collaboration on digital shop floors.

Building on the results of the 1st Open Call, these projects focus on scalable, human-centred and industry-relevant solutions, addressing skills development in areas such as human–robot collaboration, maintenance, safety, digital twins and manufacturing processes. Together, they expand the MASTER ecosystem with immersive training environments and practical learning tools.

The projects selected under MASTER's 2nd Open Call demonstrate how XR and AI can support safer, more effective and more accessible industrial training across sectors, contributing to workforce upskilling and the adoption of immersive technologies in real industrial and educational contexts.

Co-funded by the European Union

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