

Newsletter



PILLAR ROBOTS

Pillar Robots is about increasing the *autonomy* of robots

Welcome to the 9th issue of the PILLAR-Robot newsletter!

The PILLAR-Robots consortium consists of 6 partners. PILLAR-Robots aims at developing a new generation of robots endowed with a higher level of autonomy, that are able to determine their own goals and establish their own strategies, creatively building on the experience acquired during their lifetime to fulfil the desires of their human designers/users in real-life application use-cases.

To this end, the project will operationalize the concept of Purpose, drawn from the cognitive sciences, to increase the autonomy and domain independence of robots during autonomous learning and, at the same time, to lead them to acquire knowledge and skills that are actually relevant for operating in target real applications.

In particular, the project will develop algorithms for the acquisition of purpose by the robot, ways to bias the perceptual, motivational and decision systems of the robots' cognitive architectures towards purposes, and strategies for learning representations, skills and models that allow the execution of purpose-related deliberative and reactive decision processes.

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IMOL 2025 Overview

CNR



At the **IMOL Workshop** in London, researchers from **UDC** and **CNR** presented new frameworks for open-ended robot learning, including the poster “A Motivational Architecture for Open-Ended Learning Challenges in Robots.” The event featured keynotes and posters on aligning robots’ learning with human goals, confirming IMOL as a milestone for cognitive robotics.

[Read the full article](#)

DISCOVER

IEEE ICDL Conference Workshop Results

UDC



PILLAR-Robots hosted the workshop “*Alignment through Purpose in Autonomous Robots*” at ICDL 2025 in Prague, gathering experts from robotics, AI, neuroscience, and ethics to debate how robots can learn and act guided by human-defined purposes.

[Read the results](#)

REPORT

Perception Modules - Results achieved

ARC



ATHENA
Research & Innovation
Information Technologies



PILLAR ROBOTS

In PILLAR-Robots, the ARC team is advancing multimodal perception modules for agriculture, edutainment, and industry. From PLANTPose, a novel framework for 6D pose estimation of fruits, to gesture recognition in classrooms and scene graph extraction in workshops, these innovations enable robots to better understand their environment and act with purpose across diverse scenarios.

[Read the report](#)

WORK PACKAGES

Implications of open-ended learning systems

CNR



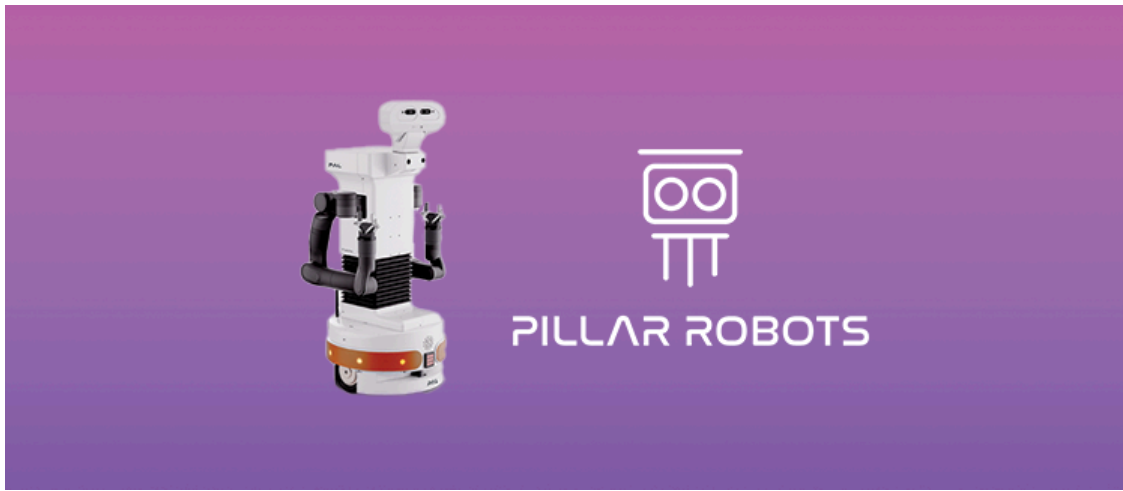
In PILLAR-Robots, CNR leads the analysis of socio-economic, ethical, and legal implications of open-ended learning technologies. Work Package 10 explores workplace impact, ethical acceptance, and regulatory frameworks, shaping policy recommendations to ensure responsible innovation and alignment with societal values.

[Discover WP 10](#)

EVENT

ADRF 2025: Where AI Meets Robotics

PAL Robotics



PAL Robotics represents PILLAR-Robots at the ADRA Forum 2025 in Stavanger, showing how mobile manipulation and HRI connect AI with real-world robotics. With resilience in focus, PILLAR demonstrates how intelligent robots bring AI out of the lab and into everyday environments. The project is already preparing for its next milestone: co-organising its third consecutive workshop on mobile manipulation at ERF 2026.

[Read about ADRF](#)



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