

Newsletter



Welcome to the 11th issue of the PILLAR-Robot newsletter!

PILLAR-Robots is 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.

EVENTS

PILLAR-Robots at ERF 2026

PAL Robotics



At ERF 2026 in Stavanger, PILLAR-Robots co-organised the workshop “*Coupling Mobile Robotics & Manipulation*”, bringing together researchers and industry experts to examine how mobile manipulation can progress from laboratory research to reliable commercial deployment. Discussions covered purposeful autonomous learning, tactile sensing, human-robot interaction and the practical challenges of shop-floor and clinical environments, including legacy equipment, limited space, safety requirements and base-arm coordination.

Discover the key insights shaping the path towards deployable mobile manipulators.

Read the full article

EVENT

Final event at ADRF 2026

PAL Robotics



PILLAR-Robots will join the **AI, Data and Robotics Forum 2026** in Porto as a Silver Sponsor, presenting four years of research on purposeful autonomous robots and lifelong learning. Through a dedicated exhibition booth, and a proposed final workshop pending approval, the project will connect with researchers, policymakers, industrial end-users and future collaborators to discuss its final results and technology-transfer opportunities.

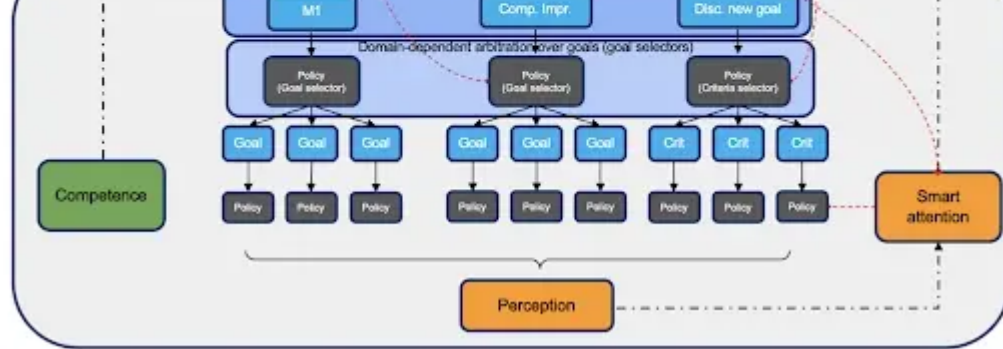
Meet the consortium in Porto and discover what comes next for autonomous lifelong-learning robotics.

Join us at the event

PROJECT RESULTS

Motivational engine put to test

ISTC-CNR



PILLAR-Robots is testing how curiosity-driven robots can remain autonomous while learning skills that are genuinely useful to their users. At the centre of this work is the **Motivational Engine**, which guides open-ended learning towards an assigned purpose without suppressing exploration. Tested in both simulated and real robotic settings, the approach helped purpose-aware robots learn relevant skills faster and fulfil user requests more reliably across changing domains.

Read how PILLAR is turning curious robots into capable, purpose-driven learners.

Discover the results

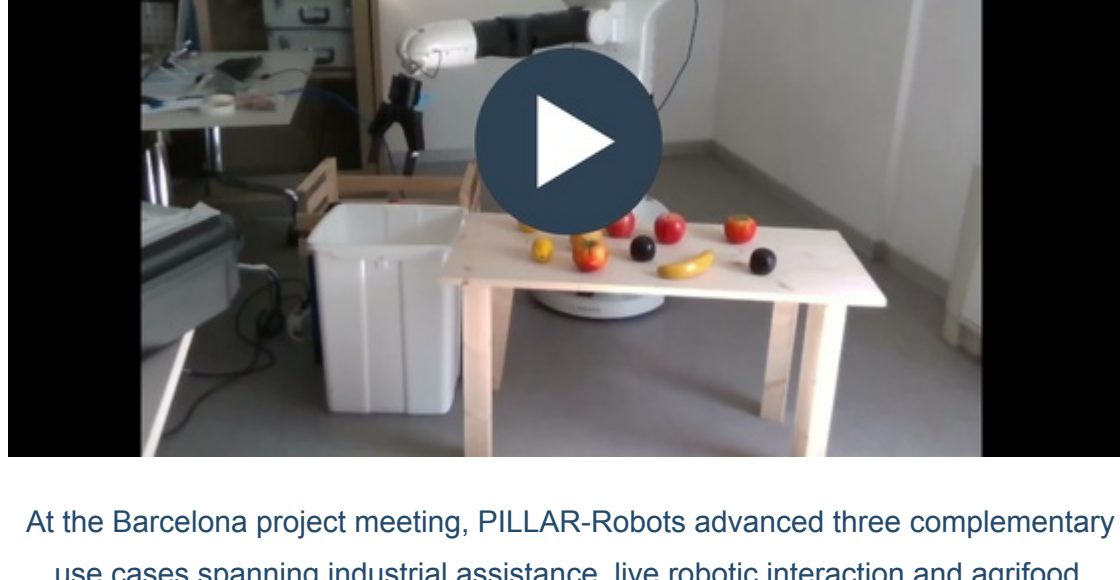
USE CASES

PILLAR Use Cases: Industry, Edutainment and Agrifood

AI2Life

UDC

Sorbonne



At the Barcelona project meeting, PILLAR-Robots advanced three complementary use cases spanning industrial assistance, live robotic interaction and agrifood production. From adaptable manipulation and purpose alignment to sorting, packaging and the study of AI bias, each scenario explores how robotic and AI systems can respond more effectively to changing real-world demands.

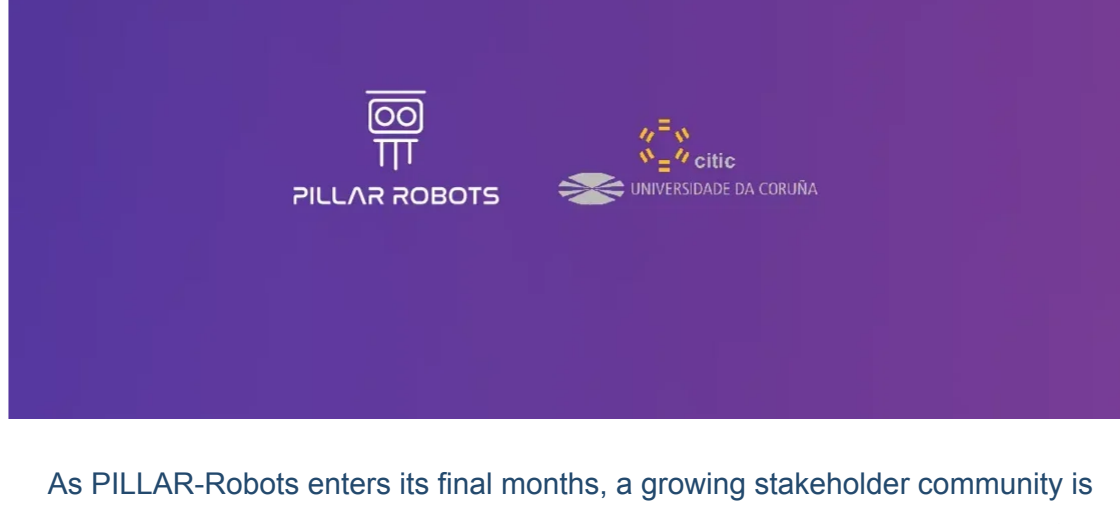
Discover how PILLAR is connecting adaptability, practical deployment and trustworthy AI across diverse application areas.

Read the full article

STAKEHOLDERS

Stakeholders involvement in PILLAR-Robots

Universidade da Coruña



As PILLAR-Robots enters its final months, a growing stakeholder community is helping connect the project's research with real operational needs across agri-food, edutainment, and SME industry and retail.

Through different levels of involvement, ranging from broad outreach to formal collaboration, stakeholders have contributed practical feedback, impact perspectives and potential pathways for validation, adoption and future cooperation.

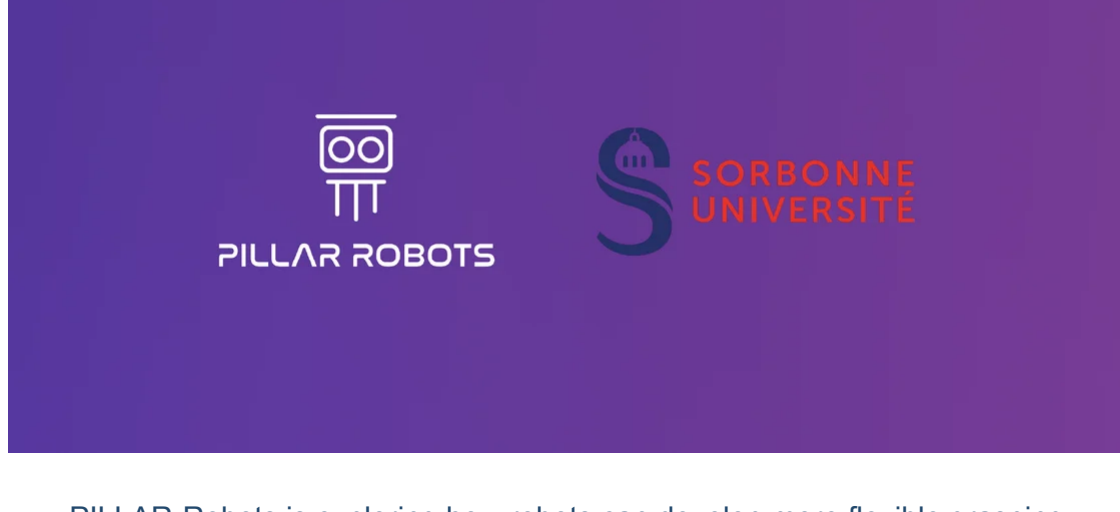
Discover how this network is helping extend the value of PILLAR-Robots beyond the project itself.

Read the full article

ARTICLE

Robotics Manipulation: the PILLAR perspective

Sorbonne Université



PILLAR-Robots is exploring how robots can develop more flexible grasping strategies for diverse objects and manipulation tasks. Through QD-Grasp, the project uses evolutionary learning and simulation to build varied grasp repertoires, improve robustness and adapt to cluttered environments and non-standard hardware.

Discover how this approach could support more advanced skills, from reliable object handling to future tool use.

Read the full article



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