
📩 **Welcome to the fourth edition of "INVERSE insights"!**

Welcome to the fourth edition of "INVERSE insights"! This is the fourth newsletter edition of "INVERSE insights", and we are excited to provide you with the latest updates, insights, and news from our Horizon Europe project focused on advancing longterm robot autonomy and continual learning. INVERSE aims at enhancing robotic capabilities, enabling them to tackle complex manipulation tasks across various domains, even when training data is limited.

Don’t miss a beat from INVERSE! Subscribe to our newsletter for project highlights, event updates, and the latest in human-robot collaboration.

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## 🔔 Project Updates

### INVERSE Project Video

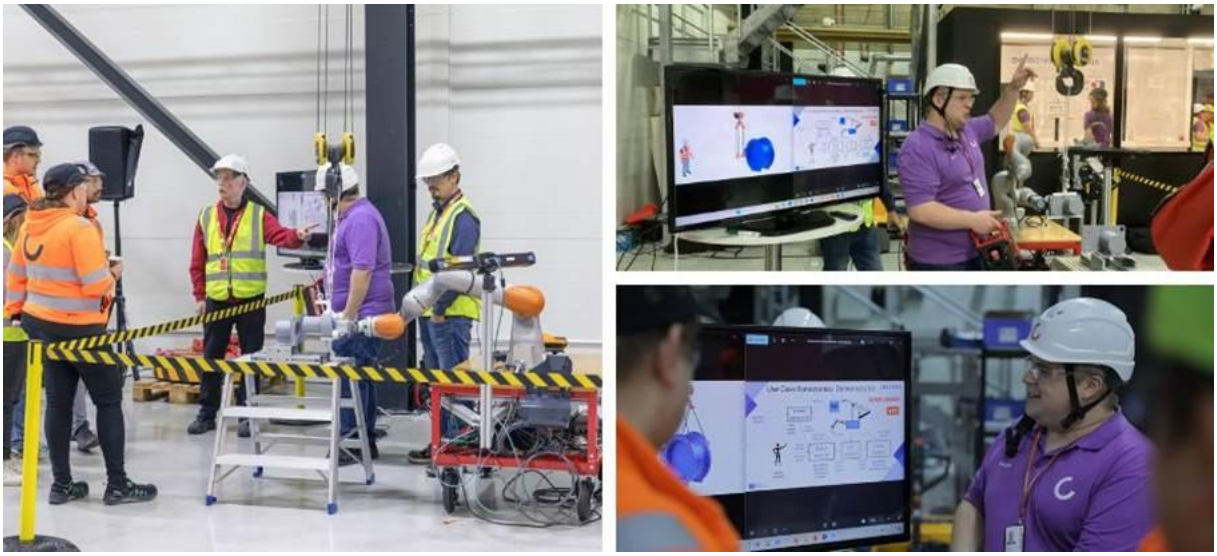

💡 To introduce the general public to our project, INVERSE Partner Steinbeis published a video which

- explains INVERSE goals
- presents the consortium and industrial partners
- showcases material from project partners

**Click here to check out the video on our website**

**Click here to find the video on the new INVERSE youtube channel**

**Human-Crane-Robot Collaborative Control – VTT and Konecranes demonstrate INVERSE Results**



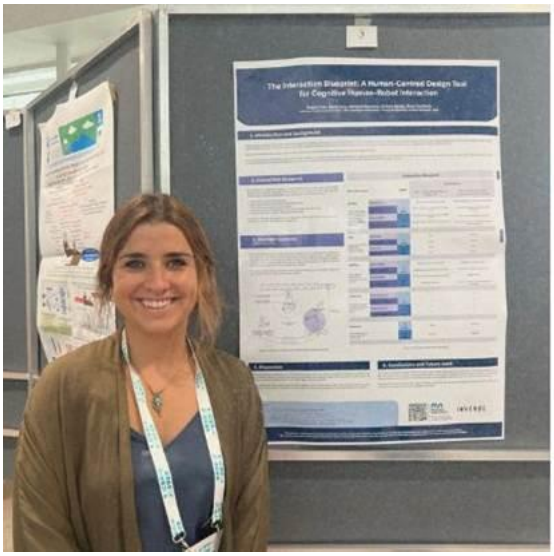
VTT and Konecranes demonstrating INVERSE results

INVERSE partners VTT and Konecranes had the opportunity to present the INVERSE project and demonstrate project results at two separate events in September and October 2025 in Finland.

On the 22nd of September 2025, VTT and Konecranes introduced the INVERSE project and demonstrated INVERSE-results in the internal “Research to Business event” of Konecranes, at the Business Research Laboratory of Konecranes. Human-crane-robot collaborative control was demonstrated using Konecranes full scale overhead crane and VTT’s collaborative robot system. On the 9th of October 2025, VTT and Konecranes introduced the INVERSE project and demonstrated INVERSE-results in the open seminar “Zero4 Symposium” of Konecranes.

**Click here to find out more**

**Short Paper Presentation and Workshop at the ICSR2025 organized by INVERSE Partner Mondragon University**




The conference ICSR- International Conference on Social Robotics took place from September 10th-12th in Naples, Italy. From INVERSE Partner Mondragon University, Nagore Osa Arzuaga, Ganix Lasa and Maitane Mazmela Etxabe, organized the workshop on "Human-Centered Robotics and Cognitive Abilities: Strategies, Reflections and Design". During the workshop, participants used Cognition-in-HRI card sets and canvas templates to model a collaborative assembly scenario. A preliminary version of a human-centered, living design tool - the Interaction Blueprint - was also tested at the workshop. Bridging technical and humanistic perspectives, this tool turns insights into actionable guidelines and patterns, mapping each task step across physical & cognitive layers (Activity, State, Abilities, Automation, Role/Authority) so teams can align decisions with trust, workload, and KPIs.

**Click here to find out more**

**INVERSE Review Meeting in Brussels**

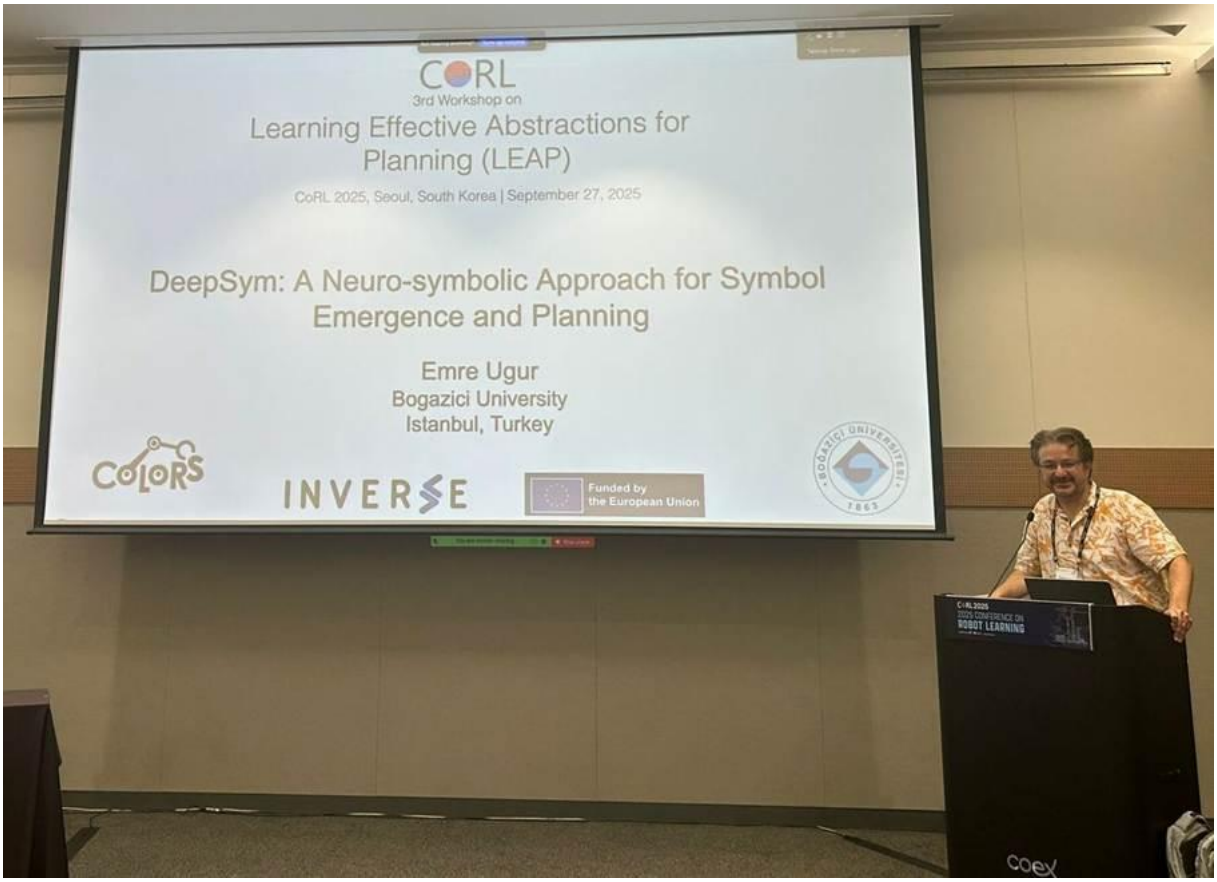
The INVERSE consortium met in Brussels from 3-4th September 2025 for the technical review meeting of the project with the European Commission. The review meeting served as a great opportunity for the consortium to get together and discuss, update each other and spend time together.

On the first day, all partners met up for a rehearsal meeting where every workpackage leader presented their work and had the opportunity to have final comments from everyone. During the rehearsal day the coffee breaks and lunch breaks were catered and sparked conversations between partners. The day ended with a social dinner at Grimbergen Bruxelles Café where everyone enjoyed traditional Belgian dishes and drinks.

During the technical review meeting, the progress in the different workpackages was presented to the project officer Emiliano Corà and two technical reviewers

Click here to find out more

**INVERSE at the Conference on Robot Learning (CoRL) 2025**




Emre Ugur from INVERSE partner Boğaziçi University was invited to talk at Learning Effective Abstractions for Planning (LEAP) Workshop at the Conference on Robot Learning CORL 2025. CORL 2025 took place on the 27th of September in Seoul, South Korea.

As one of three invited speakers, Emre gave a talk titled “DeepSym: A Neuro-symbolic Approach for Symbol Emergence and Planning” at the Learning Effective Abstractions for Planning (LEAP) Workshop.

Click here to find out more

**INVERSE at IEEE International Conference on Development and Learning (ICDL) 2025**


Burcu Kilic presenting at IEEE International Conference on Development and Learning

From September 16-19, 2025 Burcu Kılıç from INVERSE partner Boğaziçi University presented the paper "Predictability-Based Curiosity-Guided Action Symbol Discovery" at the IEEE International Conference on Development and Learning (ICDL) 2025 in Prague.

**INVERSE at I-RIM 3D 2025**

Rome, Italy – INVERSE coordinator University of Trento was present with a talk and a workshop at I-RIM 3D 2025, the VII edition of the Robotics and Intelligent Machines Conference which took place from October 17-19, 2025. Presented by I-RIM, the Italian Institute of Robotics and Intelligent Machines, the conference involves the I-RIM community with scientific dissemination events, hands-on demonstrations, exhibitions and debates.

On Friday 17th of October, University of Trento together with the MAGICIAN project organized the workshop “Industry 5.0: Workplace Transformation with Next Generation Smart Robots".

At the same conference, INVERSE coordinator Matteo Saveriano from University of Trento gave a talk at the workshop “Shared Goals, Shared Spaces: Planning and Control for Trustworthy Human-Robot Collaboration” and at the workshop "How Continual Learning and Generative AI are transforming Robotics".

**Click here to find out more**

**Innovation in Action: INVERSE & MAGICIAN at A&T Nordest**

The Automation & Testing Exhibition Nordest took place from Ocotber 28-30 in Vicenza, Italy and brought together industry and manufacturing SMEs to explore innovation, reliability, and skills for Industry 4.0–5.0. Together with the MAGICIAN project, INVERSE (EU Project) showcased their research work in the joint exhibition on MeshDMP and human movement prediction for human-robot collaboration.

👏 This joint effort is a great example of how European projects can combine expertise to accelerate innovation and bring research closer to real-world applications.

**Click here to find out more**

**Multiple INVERSE partners at International Conference on Intelligent Robots and Systems - IEEE IROS 2025**


Multiple INVERSE partners were invited to talk or present their papers at the International Conference on Intelligent Robots and Systems - IEEE IROS 2025 which took place from 20.-24. October in Hangzhou, China.

From University of Trento, Matteo Saveriano was invited to talk at the workshop "Exploring the Role of Energy in Robot Learning and Control". Also from University of Trento, Jiatao Ding, presented the papers "Explosive Jumping with Rigid and Articulated Soft Quadrupeds via Example Guided Reinforcement Learning" and "Quadrupedal Locomotion with Parallel Compliance: E-Go Design, Modelling, and Control ".

From German Aerospace Center (DLR), Joao Silverio, presented the IEEE RA-L papers “Interactive incremental learning of generalizable skills with local trajectory modulation” and “Towards safe and efficient learning in the wild: guiding RL with constrained uncertainty-aware movement primitives”.

Dongheui Lee from TU Wien gave the keynote "From Passive Learner to Pro-Active and Inter-Active Learner with Reasoning Capabilities" at the conference.

**Click here to find out more**

## 👥 Partner Spotlight

This section of the newsletter is dedicated to introducing one of the INVERSE consortium partners.

For this edition, we are going to present you our esteemed partner: civitta

Civitta is an international collaboratory, erasing artificial boundaries between digital, management consultancy, public advisory, sustainability, innovation and funding services. With multiple offices, the estonian as well as the lithuainian offices are part of the INVERSE project.

Civitta was established in 2013 as an alliance of consulting companies in the Baltic States – Civitta, Innopolis, and Advisio. From their roots in the Baltics, they expanded organic growth, mergers and acquisitions covering the map in CEE and expanding towards the Nordics and Central Asia. Today, Civitta is taking on the next leap in its journey by integrating all services into one company to offer better solutions to our clients and create a future-resilient business.

**Role in INVERSE**

Civitta oversees the life cycle analysis & sustainability aspects of INVERSE and supports the dissemination and commercialisation activities.

- They are involved in the analysis of the value proposition and competitive advantage of the products/services in terms of increased social and economic well-being as well as the impacts on circularity, sustainability, and efficient usage of materials.

- And they contribute to the life-cycle analysis to evaluate the overall sustainability of INVERSE in the use cases and generalisation of the results to other fields. This includes analysing the environmental impact of the technologies at every stage of their life cycle, including production, use, and disposal.

Civitta has led the Inverse Software Workshop on August 25, 2025, focused on approaches for inverse LCA and energy benchmarking in AI model usage.


Participants discussed a two-phase process: model training and inference, followed by practical deployment in robotics. A key topic was measuring GPU energy consumption using tools like NVIDIA SMI and AMD MicroProf to establish benchmarks for sustainability. The session concluded with plans to collect data after demonstrations and during development phases to support lifecycle assessments.

👉 **More about the INVERSE consortium**

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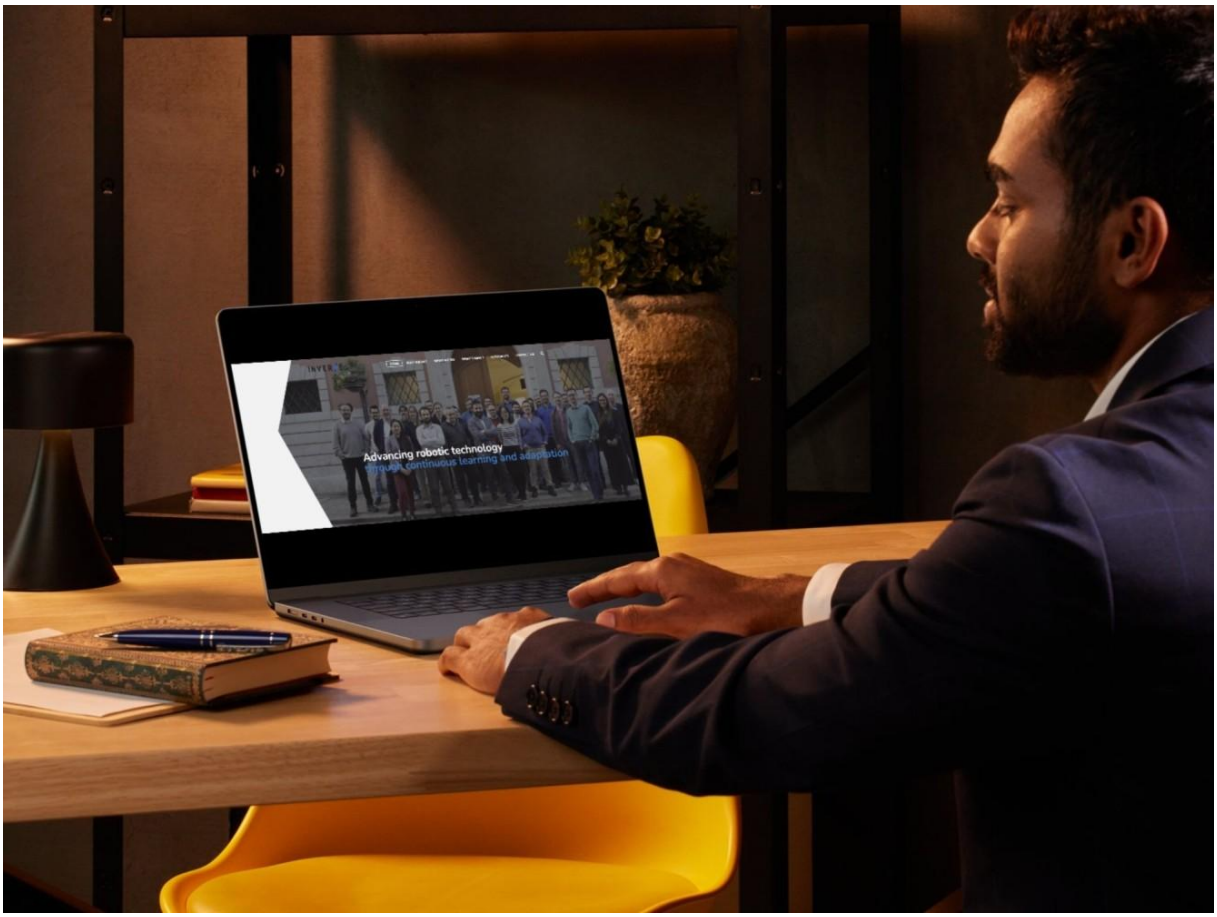
**Do you want to learn more about INVERSE? 🧐**

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