Ulysseus R&I Conference 2025

Navigating Pathways: Digital Transformation of Industry

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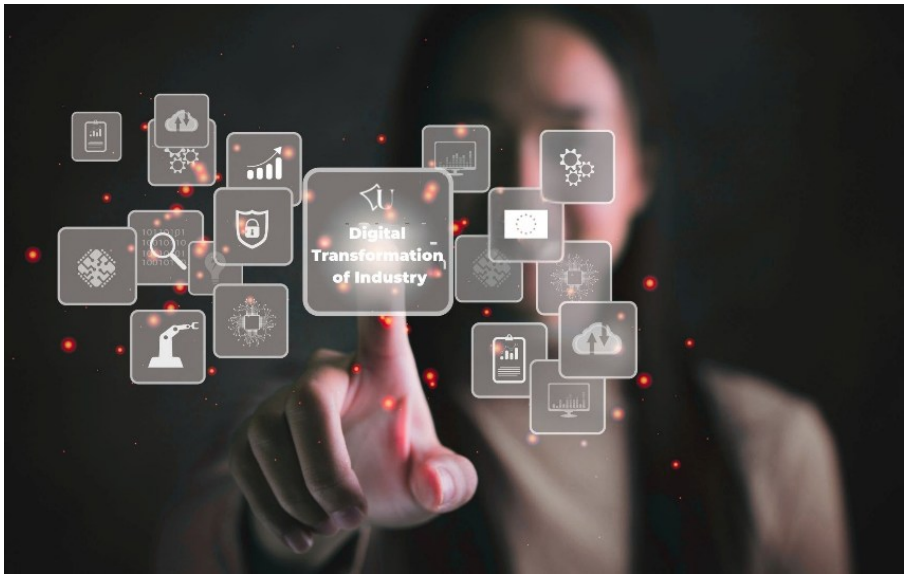
Technical University of Košice, Slovakia



Abstracts for Technical Session 2: Ulysseus Living Labs and Ulysseus Satellite Projects

Ulysseus
EUROPEAN UNIVERSITY

Technical Session 2:

Ulysseus Living Labs and Ulysseus Satellite Projects

Session Chair: Adil Bakayan (University Côte d'Azur)

Presentations of Ulysseus Living Labs best-practices and presentation of Ulysseus satellite projects in the context of digital transformation

SmartTechLab for Industry 4.0/5.0

Ján Piteľ (Technical University of Košice)

The experimental smart manufacturing system for Industry 4.0/5.0 concept named SmartTechLab has been designed and realized at the Faculty of Manufacturing Technologies of the Technical University of Košice with the purpose of supporting research and educational activities in the field of digitalization and automation of production processes. In this experimental system, there are implemented advanced manufacturing technologies (3D printing, rapid prototyping) and robotics technologies (industrial and collaborative robots) supported by technologies for full digitalization (digital twin, cloud platforms), quality and process control (advanced control, vision systems, and RFID/IIoT product identification). An important part of this experimental system are technologies based on artificial intelligence (machine and deep learning) for parts and product recognition, and technologies using virtual/augmented and mixed reality to support HRC in assembly processes.

Living Lab on Robotics and Healthcare Innovation at Genoa

Clio Flego, Fulvio Mastrogiovanni (University of Genoa)

The Innovation Hub in Robotics at the University of Genoa is launching a state-of-the-art Living Lab dedicated to advancing robotics and healthcare innovation. This interdisciplinary initiative serves as a dynamic, real-world testbed where researchers, patients, industry partners, and local governments collaboratively develop, evaluate, and refine technologies tailored for healthcare applications. The lab's mission is to bridge the gap between academic research and clinical practice by fostering a user-centered, participatory design environment that supports continuous innovation and rapid prototyping. Located within a clinical and academic ecosystem, the Living Lab focuses on key areas such as assistive robotics, rehabilitation technologies, human–robot interaction, and AI-driven healthcare solutions. A focus on co-creation processes, ethical deployment, and social acceptability, at the same time, ensure that the technologies developed are functional, safe and aligned with real-world needs and regulatory frameworks. The facility will be equipped with advanced robotic systems and simulation environments, enabling iterative testing and longitudinal studies. It will also support educational programs, fostering new generations of engineers, healthcare professionals, and innovators trained in interdisciplinary and translational research. The Lab aims to promote open innovation through collaborations with hospitals, tech companies, startups, and public institutions, making it a local, regional and European hub for smart health and robotics. By

integrating cutting-edge robotics with clinical insight and societal input, the Living Lab at the University of Genoa aims to accelerate the development and adoption of transformative healthcare technologies—ultimately improving patient care, enhancing quality of life, and contributing to sustainable health systems.

Living Labs for AI-Enhanced Digital Transformation in Higher Education: A Scalable and Inclusive Model

Julia Reinhard (Haaga-Helia University of Applied Sciences)

This session presents a hands-on model for implementing Living Labs as part of a broader digital transformation strategy in higher education. Drawing on the Erasmus+ funded ALFA Labs project, the session explores how Living Labs can be structured to support the applied testing of AI tools in both virtual and physical learning environments while promoting inclusion, accessibility, and sustainability.

In this session, participants will explore how Living Labs can be used to co-create lesson plans, pilot an AI readiness assessment tool for HEIs, and support the development of the ALFA Kit—a practical resource for scaling assistive and inclusive AI use in education. The presentation will detail the dual-mode structure of the labs (virtual and physical), recruitment strategies to ensure diverse participation, and thematic applications such as entrepreneurship, language learning, pedagogy, and service design.

Participants will also learn about the methods than can be used to embed accessibility, adaptive learning, and green practices into the labs, as well as the role of students as agents of change in the digital transformation process. The session will conclude with key insights, challenges, and recommendations for replicating AI Living Labs in other institutional contexts.

Building Sustainable Alliances: How Satellite Projects Enhance Synergies and Maximise Institutional Impact

William O'Gorman (Haaga-Helia University of Applied Sciences)

The Haaga-Helia Applied AI for Business and Education Innovation hub has implemented a unique strategy to advance the goals and activities of the innovation hub through the active procurement and running of specific satellite projects. The funded EU projects directly compliment the actions of the hub and enhance the synergies between tasks and WPs as part of Ulysseus. This approach has proven how external EU funding can directly compliment the activities of the European Universities Alliances and provide a sustainable pathway for future innovation activities.

Ulysseus Satellite Project RIGO

Djibril Dieng (University Côte d'Azur)

READY, IMMERSE AND GO! Explore the forefront of international mobility with RIGO's advanced Virtual Reality (VR) platform. Immerse yourself in a world where innovation meets accessibility. The project crafts a VR platform, a playground for immersive virtual scenarios that will transport students and teachers to new horizons without leaving their comfort zone.

The RIGO VR platform will host immersive virtual scenarios, providing an innovative and accessible international mobility experience. Beyond the destination, our virtual scenarios are powerful tools designed to hone the skills needed for navigating a global, digital world. RIGO is a catalyst for Ulysseus, increasing participation in various mobility experiences and enhancing employability for students and teachers alike.

The MINERVA Erasmus+ Project on Digitalisation Processes in Latin American University Ecosystems

Jesús Sabariego (University of Seville)

MINERVA is a network plotted by Latin American universities from Brasil, Argentina, Costa Rica, México, Chile and Colombia including University of Seville. The aim of the project is to contribute to the research in the digitalisation processes in the higher education ecosystem in a compared perspective using Engaged approaches through living labs and other participative methods. We'd like to introduce the project to the technical staff as an opportunity to share and spread innovative methods and outcomes and join partners to improve the project with Ulysseus partners.

More Information

Confernce Page: https://ulysseus.eu/events/navigating-pathways-digital-transformation-of-industry-conference-2025/

Contact: Lucia Knapčíková (conference@ulysseus.eu)

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