Case 8 - DIH4S (Romania) - piloting & test-before-invest service

Digital Innovation Hub for Society (DIH4S) (Romania), is coordinated by Cluj IT Cluster with the aim to support local and international SMEs, and other industrial enterprises and organisations such as hospitals, educational institutions and public administration, through testing and applying digital technologies including data science, expert systems, machine learning, neuronal networks, evolutionary optimization and artificially intelligent robotics. DIH4S combines AI with Cybersecurity technologies, Cloud Computing and Internet of Things providing a critical mass of experts in these respective technology fields.

DIH4S addresses the needs of more than 50 SMEs on a local and international scale at an annual level by providing a wide range of services ranging from demos on testing digital technologies in dedicated facilities provided by the hub, to consultancy on investment opportunities and training courses as well as to more specialised digital services with a focus on artificial and augmented intelligence. In addition, DIH4S provides SMEs and star-ups with access to 12 labs including a High Performance Computing Lab, an Industrial Robotics Lab, a Smart Factory Lab, a Collaborative Robots Lab, an Automation Systems Lab, a Production Optimization Lab, a Face Recognition Lab, a Smart City Lab, a 3D Scanning and Measuring Lab, the Dassault Systèmes Solutions Center, the Siemens Lab for Automation of Hydraulic and Pneumatic Systems and the Integrated Manufacturing Systems and Machine-Tool Control Lab. Finally, the hub provides interested SMEs and bigger industry players with an extensive list of training courses indicatively including Applying Python in Machine Learning, Cyber-Physical Systems, Digital Technologies for Creative Engineering, Industrial Robot Programming, Business Process Modelling for Digitalization, Management of Procurement Using Digital Systems and Artificial Intelligence for Facial and Emotion Recognition, Autonomous Mobile Robots and ROS, Programming of Industrial Cobots and Factory Automation with Electro-Pneumatics.

Example of service provided to SME

The hub has recently supported a regional pharmaceutical SME, Plant Extrakt from Radaia region, in cooperating with a research group from the Technical University of Cluj-Napoca in order to create a novel installation for extraction of some chemical substances from the resin of a plant. The system was developed incorporating adaptive control and connected to the data center to enable data and information collection and analysis.