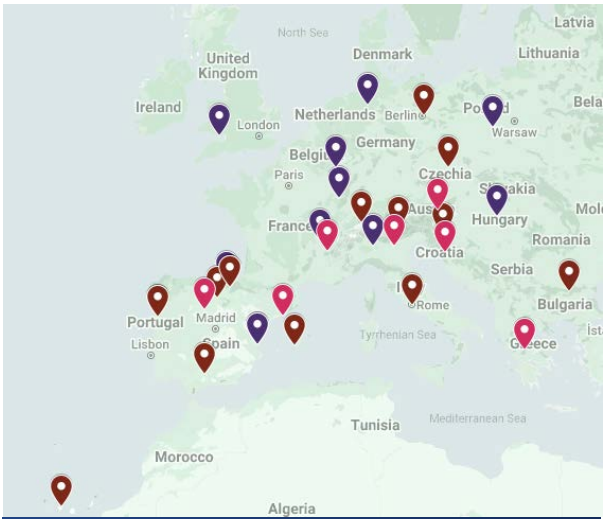
DIH NETWORK



31 DIH IN EUROPE

The DIHs all have a strong regional foundation and are role models for the transfer of research results into the industrial practice of regional SMEs and MidCaps.

DiH4CPS

This project has received funding from the European Union's Horizon 2020 research and innovation programme under grant agreement No 872548.

Start : 01/01/2020
Duration : 36 months
Max grant: 7.999.333,75 €
EC funding: 100 %
Grant Agreement: 872548

PARTNERS

InterOP VLab · Universitat Politècnica de València · evogy · knowledge · CONTROL 2K total solutions provider · SWMS CONSULTING · ITI INVESTIGATE TO INNOVATE · Luxembourg Institute of Science and Technology LIST · Université Lumière Lyon 2 · PRODUTECH · QUAI ALPHA · POLITECNICO MILANO 1863 · Linde · POLYPLAN KREIKENBAUM · multi scan · innovalia ASSOCIATION · innomine · mews · LUXMOBILITY · DSC CONSULTING · CCI VOSGES · MIRAI tek · DMTW · PSNC · BRC · 3DKUMO · BIBA · UNINOVA · 4S-2000 · CRAN · CIRTES · föra

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SENSORIZED PLANTER BOXES EXPERIMENT

DiH4CPS

Fostering DIHs for Embedding Interoperability in Cyber-Physical Systems of European SMEs

Helping European enterprises overcome the innovation hurdles

Establishing Europe as a world leading innovator of the 4th Industrial Revolution.

DIH4CPS will create an embracing, interdisciplinary network of DIHs and solution providers, focused on cyber physical and embedded systems, interweaving knowledge and technologies from different domains, and connecting regional clusters with the pan-European expert pool of DIHs.

DISCOVER OUR APPLICATION EXPERIMENTS

SENSORIZED PLANTER BOXES FOR URBAN ORCHARDS

Main objective is development of a new innovative product: a smart planter boxes primarily conceptualized for urban orchards.

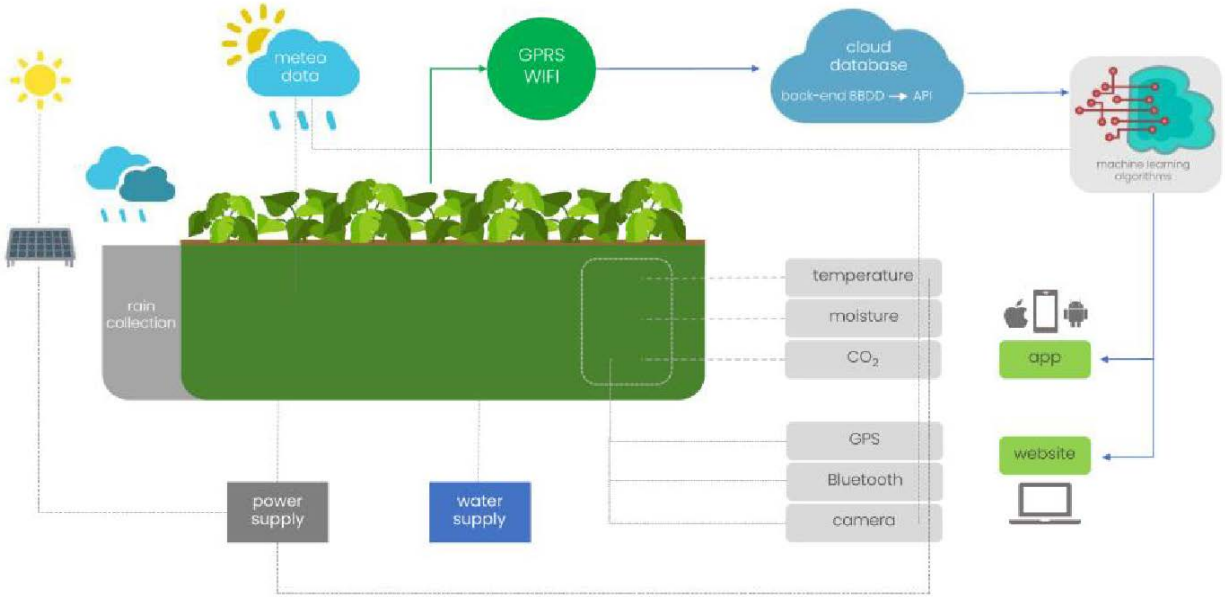
This device will track soil temperature, humidity, and weather conditions. Taking the monitoring data into account CPS is then able to control the conditions through an irrigation system. Users can monitor the process by mobile apps and web server, guaranteeing the survival of the cultivated plants and, also, promoting savings of water and energy in the cities

APPROACH

Smart Planter Boxes are equipped with environmental sensors and embedded controller, working together as data transmitter and operator of the local control loop of irrigation. Multiple Smart Planter Boxes will create a LPWAN network connected to the local gateway, forwarding the data packets of all devices to the cloud services and user interfaces.

EXPECTED RESULTS

Experiment aim is to develop a smart planter box that assists in cultivating urban orchards and flowerbeds leading to an autonomous system that produces greening and agricultural products, while saving water and energy and decreasing cultivation effort. Finally, all components create an end-to-end IoT system.



Expected Impact

Föra has a business opportunity in urban planning and management of green areas. This smart pot, aligned with the UN 2030 SDG will help to improve the sustainability of cities, making efficient use of water and energy and improving the livability of urban spaces.

föra forest technologies

HPC4 Poland

PSNC