



Opening Session.

The Italian Way to (Successful) IoT Startups.

Monday, Sept. 11, 9.15-9.45. Room Europa.

Program.

- IDESIO: Smart Agriculture; Speaker: Roberto Verdone.
- SMARTLY: Smart Living; Speaker: Leonardo Gagliardi.
- UNISSET: Factory Automation; Speaker: Nicolò De Carli.
- ALLEANTIA: Industry 4.0 Plug&Play; Speaker: Antonio Conati Barbaro.
- WEST AQUILA: Structural Health Monitoring; Speaker: Stefano Tennina.

Company Profiles.

IDESIO

www.idesio.com

IDESIO was founded in 2016 as a spin-off of the Radio Networks research group at the University of Bologna. IDESIO delivers IoT wireless solutions for environmental monitoring and other applications in large and sparse areas. Albatross is a LoRa gateway compatible with many drone platforms, autonomous, light and energy efficient. It provides IoT connectivity to ground sensors through drones to the cloud.

IDESIO is currently participating to the European Project BRIGAD that supports selected startups working in the field of smart agriculture. In this context, IDESIO is testing a new solution, named Mole, which allows efficient soil moisture measurements in large areas, using underground radio waves.

SMARTLY

www.smartlysrl.it

Smartly was founded on May 23rd, 2014 as a spin-off of the University of L'Aquila. The first project was related to the creation of a solution capable of preventing cases of hyperthermia of forgotten children in Car. The Care-me configuration: a single unit, autonomous in the sensors, autonomous in connectivity, integrated in a friendly envelope in the eyes of the child and above all equipped with autonomous power supply, not connected to the car, does not find competitors on the market. As a reference market was taken the European one which sees the birth of approximately 5 million children each year.

UNISSET

www.unisetcompany.com

UNISSET s.r.l. is a joint company of the University of Bologna and UNITEC group s.p.a. that sums more than 15 years of the research in Telecommunication and Electronic design with the industrial and marketing experience of a large manufacturing group. The main task of UNISSET is to bring new technologies such as the Ultra-Wide Band to the stage of commercial products in the area of Industrial Internet of Things.

One of the key product of UNISSET is Sequitur, a fully HW-FW-SW co-designed architecture, capable of high-accuracy 3D tracking of objects and persons in complex indoor environments with applications to logistics, Industry 4.0, drones navigation and others. Sequitur is based on unique concepts of fully asynchronous and

modular positioning architectures, centralized and decentralized, offering outstanding performance, robustness, and flexibility with respect to user's needs.

ALLEANTIA

www.alleantia.com

Alleantia enables the Plug&Play Industry 4.0.

Alleantia edge computing software connect, in an easy and intuitive way, any machine, production system, equipment, from any brand and manufacturer, with on-premise or on-cloud applications and platforms, to implement in a timely manner, Machine Learning, Predictive Maintenance, Smart Grid, AR/VR and other Industry 4.0 solutions at a very affordable cost. Through Alleantia edge gateway software, IT/OT integration effort is drastically reduced, more than 80%. . Alleantia software is used by dozens of manufacturing companies (eg Brembo) of any size in their Industry 4.0 projects, in energy, in transport, and by more than 40 partners (software vendors and integrators). TIM use Alleantia software in the Smart Factory 4.0 offering. Alleantia is the reference Industrial IoT solution provider for Advantech, Dell and Cisco.

Alleantia software is based on the XPANGO technology, which creates for every industrial device a "driver" (similar to the drivers to connect printers to PCs) codeless (without writing software code). More than 5000 drivers are available, and software tools to create their own drivers independently. The software includes filtering, aggregation, alarm creation, events, mathematical operations. Finally, interfaces ready for many software platforms (SQL, REST, Azure IoT, MQTT, ...) and applications (Dropbox, Yammer, Dassault 3DS, Bravo MES, ...) for the widest possible range of uses and maximum speed of integration. The software works in retrofit on existing systems and does not require system changes / re-engineering.

WEST AQUILA

www.westaquila.com

WEST is a highly dynamic and innovative company, which aims at bridging the gap between the academic and industry sectors. In this light, in any projects it is involved into, it envisions the possibility to exploits cutting-edge technologies in multiple application domains. As an R&D company, there is always a strong interest in fostering new cooperation to study, analysis and prototyping of solutions in the field of wirelessly interconnected and networked embedded systems. The background of the company relies upon system design methodologies, wireless networked embedded systems and heterogeneous distributed networks. The co-founders have brought into the company the experience gained through participations to European-funded projects and through long-lasting R&D collaborations with many companies. The main expertise of WEST lies in the development of innovative solutions and technologies for networked embedded systems, which encompass the development of large-scale system level simulators and network testbeds

In the recent past, WEST has participated in several EU projects, including Greenet (an Initial Training Network (ITN) Marie Curie project that is focused on the analysis, design, and optimisation of energy efficient wireless communication systems and networks), WSN4QoL (Wireless Sensor Networks for Quality of Life, "FP7 - People - Industry-Academia Partnerships and Pathways"), SmartNRG ("FP7 - People -Industry-Academia Partnerships and Pathways", aiming at an energy efficient management of the new electric grid networks through smart meters), and CASPER ("Marie Skłodowska-Curie Research and Innovation Staff Exchange (RISE)" where the goal is to evaluate and improve the quality of experience of mobile users in multimedia applications). Moreover, WEST Aquila has been a member of NetWorld2020, the European Technology Platform (ETP) for communications networks and services and a founding member of the SME Working Group (www.networld2020.eu/sme-support).

Similarly, on the National level, it is worth mentioning that WEST has participated in several activities in collaboration with University of L'Aquila. In particular, a Structural Health Monitoring project, in which a WSN has been designed and deployed to monitor vibrations of structures after the earthquake of 2009 in L'Aquila, and UbiCare and CASA+, two projects aimed at monitoring aged people and patients suffering from Down syndrome remotely from their home.

Finally, WEST is a prototype builder to give proof of concepts, rather than a manufacturer or a board seller. In all the projects, WEST has provided its knowledge in building wireless embedded systems prototypes and doing performance evaluations on communications protocols and optimization algorithm.