

Workshop on Advances in IoT based methods for Smart Water Distribution and Management in Agriculture (IMSA 2018)

Time: 15 November 2018, 10:45 – 12:00

Place: University of Bologna, Main building

Workshop Chairs: Luca Roffia

Viale del Risorgimento 2, room: Frigerio

Water is vital for ensuring food security to the world's population, and agriculture is the biggest consumer. In order to address IoT based methods and approaches for smart water management in irrigation, EU and Brazil are funding SWAMP (Smart Water Management Platform), a research and innovation project of the Horizon 2020 Framework with pilots in Italy, Spain and Brazil. SWAMP partners organize this Workshop with the aim of bringing together people interested to discuss and enlighten the challenges, the opportunities and the long term ambitions of agriculture digitalization. IMSA18 is addressed to researchers and stakeholders of this multidisciplinary domain.

The topics of interest include the following subject areas:

- Platforms, tools and apps in smart agriculture
- Flying and ground sensors&actuators in smart agriculture
- Drones based monitoring and control in agriculture
- IoT based solutions for precision irrigation
- IoT based solutions for water distribution in agriculture
- Big-data based learning in agriculture
- Smart agriculture and climate change
- Business models for IoT in agriculture
- Challenges, opportunities and threads in smart agriculture

Program

November 15 (Thursday)

University of Bologna, Main building, viale del Risorgimento 2; Room: Frigerio

| | | |
|--|-----|--|
| 10:30 | 15m | Coffee break, Lobby in front of Aula Magna |
| Session: Workshop on Advances in IoT based Methods for Smart Water Distribution and Management in Agriculture | | |
| Room: Frigerio | | Chairman: Luca Roffia |
| 10:45 | 15m | Addressing to IMSA workshop participants and open talk, by Juha-Pekka Soininen, VTT, Finland |
| 11:00 | 15m | Comparison on Scorecard and Dashboard in Smart Water Monitoring Application, by Abdul Fuad, CyberSecurity, Malaysia |
| 11:15 | 15m | Soil water balance model CRITERIA-1D in SWAMP Project: Proof of Concept, by Giulia Villani, Paolo Castaldi, Attilio Toscano, Camilla Stanghellini and Tullio Salmon Cinotti, University of Bologna, Fausto Tomei, Arpa, Italy, Rodrigo Filev Maia, University Center of FEI, Brazil, Markus Taumberger, VTT, Finland, Paola Zanetti and Stefano Panizzi, Consorzio di Bonifica dell'Emilia Centrale, Italy |
| 11:30 | 15m | Scalability of an Internet of Things Platform for Smart Water Management for Agriculture, by Ivan Zyrianoff, Alexandre Heideker, Dener Silva and Carlos Kamienski, Federal University of ABC, Brazil |
| 11:45 | 15m | Control Methods in Automated Gravity Irrigation Systems: a review, by Cristiana Bragalli, Lorenzo Zingali, Alessio Domeneghetti and Armando Brath, University of Bologna, Italy |
| 12:00 | 1h | Closing of IMSA 2018 workshop and Lunch |



ALMA MATER STUDIORUM
UNIVERSITA' DI BOLOGNA
ARCES - DICAM - DISTAL



RNP

