Call for Papers

Track: Smart Agriculture

COINS is the premier conference devoted to omnilayer techniques for smart IoT systems, by identifying new perspectives and highlighting impending research issues and challenges. The aim of this track is to exchange and discuss innovative proposals on agriculture, livestock farming, aquaculture and forestry based on Internet of Things and other related technologies, techniques and architectures. Topics of interest include, but are not limited to, the following:

A) Technologies, techniques and architectures

- Long-Range and Low-Power Wide Area Open Source network

- Energy harvesting smart sensors

- Innovative sensing technologies in agriculture, livestock and aquaculture (pesticides, nutrients, biometric, pollutants, etc.).

- Cloud computing, Fog Computing and Edge Computing

- Data Spaces, Big Data, Smart Data, and Open Linked Data

- Event driven approach to agricultural data and solutions

- Multispectral imaging – geospatial data sources

- Autonomous Unmanned Aerial for agriculture services and Terrestrial Vehicles and Swarms, Robots and Cobots

- Artificial Intelligence, Machine Learning, and Deep Learning Solutions

B) Solutions applied to specific problems

- Decision support systems for water, energy and pesticides usage optimization

- Early detection and prediction of fungi and insect pests

- Data Mining for field yield increase

- Cross-agri-domain interoperability and integration

- Solutions for apiculture - management, disease and poisoning prevention

- Sustainability in mixed farming environments