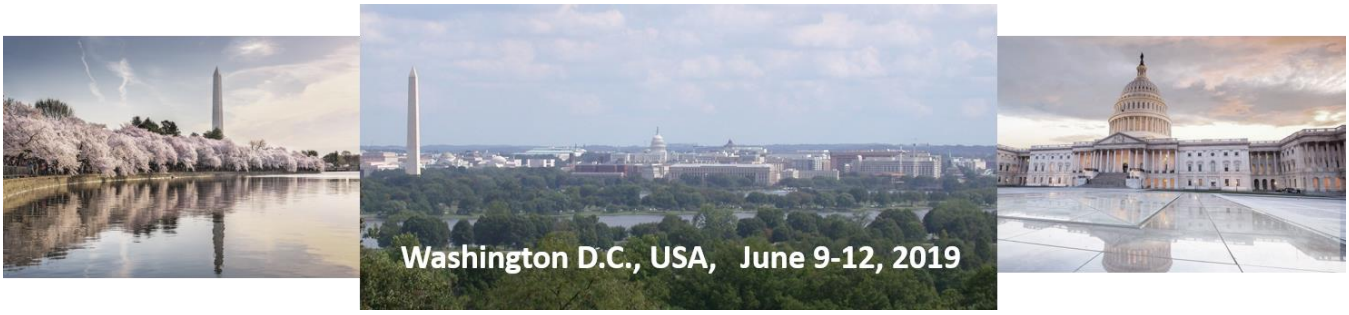

DIPI 2019
The First International Workshop on
Data Distribution in Industrial and Pervasive Internet

Preliminary CALL FOR PAPERS

The ubiquitous presence of data originating from the integration of wireless networks, pervasive computing, industrial equipment and people, has led to an increased interest in solutions for distributed data management and efficient data distribution at the edge of the networked environments. The essence of this vision is the creation of data-driven networks saturated with pervasive sensing, computing, and wireless communication that ideally support the needs of individuals, societies and industries.

Contributions can be analytical, empirical, technological, methodological, or a combination of those. Papers reporting strong data-oriented systems engineering contributions backed by solid and appropriate evaluations are strongly encouraged. The impact of the contributions should be demonstrated in the context of the data-related aspects in the pervasive and industrial internet.

Research contributions are solicited in all application areas pertinent to industrial and pervasive data distribution, including but not limited to:

Data distribution in Industrial Internet, where novel data management techniques can be supported by networking protocols, algorithms and processes, and where intelligent entities can exchange and manage distributed data in order to achieve improved performance for both the cyber and the physical components.
Particular areas of interest include:

- Data-driven industrial IoT architectures with multiple inter-connected networking technologies
- Pervasive data distribution and management algorithms for the Industrial Internet
- Networking protocol stacks and standardization for enabling efficient data distribution
- Industrial cloud and edge computing, communication and networking technologies
- Data-oriented networked control, distributed optimization, and distributed learning
- Industrial internet robotics and autonomous systems
- Modeling of tightly integrated, data-intensive Cyber-Physical processes, computation platforms, and networks
- Data distribution solutions which satisfy the Industry 4.0 requirements

Data distribution in Pervasive Internet, where the ambient intelligence of network devices embedded in the environment can provide a constant and unobtrusive data management and distribution.
Particular areas of interest include:

- Large-scale data management and distribution in pervasive internet
- Clouds, cloudlets, fog computing, device-to-device coordination
- Pervasive big data and artificial intelligence
- Smart spaces and intelligent environments
- Cognitive computing techniques
- Social Cyber-Physical Computing and human in the loop, data-oriented approaches
- Crowdsensing and analytics of human user data in Cyber-Physical Systems

Contributions focused on the horizontal topics of (a) security, privacy, trust (b) reliability, safety (c) experiences from real-world deployments, testbeds, case studies, are also welcome, as long as they target one of the aforementioned application areas.

Editorial follow-ups

Extended versions of selected papers might be considered for possible fast track publication in a Special Issue of **Elsevier Computer Communications**

Important dates
Paper Submission (EXTENDED): March 25, 2019
Acceptance Notification: April 20, 2019
Camera Ready: April 29, 2019

Workshop Chairs
Theofanis P. Raptis, IIT-CNR, Italy
Georgios Z. Papadopoulos, IMT Atlantique, France

For more information: http://cnd.iit.cnr.it/dipi2019