

IEEE ICC 2017 21-25 May 2017 // Paris, France





2nd Convergent Internet of Things (C-IoT) Workshop

Today, most industrial contenders are advocating for their versions of IoT, while mainstream research efforts address singular views of scalable sensing, massive RFID-based identification, and other topological remedies to handle the ensuing Big Data communication and sense-making processes. The IoT architectures need to adopt a systems approach; "sensing systems" instead of "things" will take center stage in the next generation IoT—be they environmental, industrial, logistic, financial, or physiological systems. This will facilitate the understanding, and subsequent optimization, of interdependencies of complex IoT systems.

In its 2nd iteration, this workshop will build on its success to address challenges in realizing a scalable and inherently heterogeneous IoT, and solicit novel solutions to functional elasticity and spatial scalability. We invite original contributions that address an integrated and systems-wide vision of IoT infrastructures, encompassing collaboration and cooperation schemes, to ensure maximal utility of ubiquitously accessible smart resources. We strongly encourage results from industry and academia, and solicit research that facilitates functional scalability for a truly survivable version of IoT. We seek original contributions that have neither been previously published nor currently under review. Authors can submit full papers (up to 6 pages) that describe complete work in a self-contained manner with the intent to deliver an oral presentation. All accepted submissions will be published in the ICC'17 proceedings and the ieeeXplore portal.

- Convergent paradigms in the Internet of Things
- Data and organization Interoperability challenges in IoT systems
- Quality of Information pruning for crowd-solicited data in
- heterogeneous IoT
- Resource identification & discovery in heterogeneous IoT
- Ad hoc resource management and profiling in the IoT
- IoT System-level Interoperability challenges
- Resource sharing and actuation conflicts resolution
- Crowd-solicited IoT proliferation
- Device-2-Device interaction across application domains
- IoT systems collaboration and cooperation mechanisms

- Convergent services on malleable IoT infrastructures (e.g. based on Information/data planes)
- IoT edge analytics (Fog / Cloudlet / Cloud)
- Infrastructure-less IoT survivability
- On-demand distributed IoT service management
- Beyond IPv6 Connectivity for on-demand IoT
- IoT service orchestration and scheduling
- Innovative IoT incentive schemes
- Industrial IoT Value creation and challenges
- Non-proprietary standardization frameworks for heterogeneous IoT
- Legal and governance frameworks for IoT regulation

Important Dates:

Paper Submission: 18 November 2016 Notification Date: 17 February 2017 Final Paper: 10 March 2017

Organizing Committee: General Chair

Maurizio Dècina, Politecnico di Milano, Italy **Program Chairs** Sharief Oteafy, Queen's University, Canada Mervat Abu-Elkheir, Mansoura University, Egypt