Special Session:
Communication, Security and Data Analysis in the Social Internet of Things

The Special Session will be part of the 14th International Symposium on Wireless Communication Systems (ISWCS 2017), technically co-sponsored by the IEEE Communications Society (ComSoc), to be held in Bologna, Italy, on August 28-31, 2017. Paper submissions are invited on the Special Session topic.

Special Session papers will be reviewed by the TPC of ISWCS 2017; they will be part of the Conference Proceedings, and they will be uploaded to IEEE Xplore.

Call for Papers

Analysts around the world all agree on the fact that the next few years will see a massive increase and growth rates in the Internet of Things (IoT) penetration in the society as well as in the number of devices active and connected to the Internet, be they smartphones, smart sensors, smartbands, smartwatches, and the like. The special session addresses the main aspects that could effectively render IoT devices a future realizable interconnected "Social Network of Things". This entails the creation of automated social networks, leveraging the friendship relationships created between smart objects, as well as social interactions between objects and humans to enhance the fruition of applications currently available in traditional IoT networks. The former addresses the creation of various kinds of social relationships among devices, such as the colocation, the sharing of the owner or the existence of a social relation between different owners, in order to provide or advertise a common service or application. The latter refers to the social usage of networks of smart devices for purposes such as technological assistance, healthcare management, logistics, traffic management and so on. The theme comes together with different research issues to be further investigated and encouraged by this special session: the interoperability of heterogeneous units, energy and data management, security, privacy and trustworthiness of the communications, self-organization, the creation of new business models as well as killer applications, and so forth.

Contributions are solicited, but not limited, in the area of:
- Social network topology formation and estimation in IoT networks;
- Social network analysis applied to IoT environments;
- Access control and authentication strategies for social IoT devices;
- Humans to things, and things-to-things communications;
- Traffic classification and identification of relationships in IoT networks;
- Everything as a Service paradigm in the social IoT scenario;
- Trust and reputation applied to communication strategies in social IoT;
- Integration of Fog computing and Cloud computing techniques into social IoT scenarios;
- Social applications and social role of IoT;
- Big Data and Big Data Stream technologies applied to social IoT networks;
- Privacy in collection and sharing of data in social IoT environments.

Submission Guidelines

Prospective authors are invited to submit high-quality technical papers (max 6 pages) using standard IEEE conference templates that can be downloaded from the link http://iswcs2017.org/call-for-papers/. The proposal should be submitted by the deadline, via the EDAS link: https://edas.info/newPaper.php?c=23468&track=85445

Key Dates

- Paper submission: Thursday, May 4, 2017
- Acceptance notification: Friday, June 16, 2017

Organizing Committee

Special Session Organizers
Riccardo Pecori, Univ. eCampus (IT), Antonio Iera, Univ. of Reggio Calabria (IT)

General Chairs
Roberto Verdone, Univ. of Bologna (IT)
Chiara Buratti, Univ. of Bologna (IT)

General Co-Chair
Adrian Kliks, Poznan Univ. Technology (PL)

Steering Committee
Yuming Jiang, NTNU (NO), Boon Sain Yeo, SensiMesh (SG), Carlos Faouzi Bader, CentraleSupelec (FR), Rodrigo C. de Lamare, Univ. of York (UK), Didier Le Ruyet, Le CNAM (FR)

TPC Chair
Marco Chiani, Univ. of Bologna (IT)

Special Sessions Chair
Andrea Giorgetti, University of Bologna (IT)

TPC Co-Chairs
Carlos Faouzi Bader, CentraleSupelec (FR)
Gianluigi Liva, DLR (DE)

Klaus Moessner, Univ. of Surrey (UK)
Jordi Perez Romero, UPC (ES)