Call for papers
Special Issue on

Cloud Edge Computing in the IoT:
Pave the way for an efficient data processing

The number of connected devices worldwide continues to grow and is forecast to triple by the end of 2019, from 15 to 50 billion. Such an explosion will inevitably be the catalyst of Cloud infrastructure transformation. Being established too far away, traditional data centers struggle to meet stringent bandwidth and latency requirements of IoT systems. That is why a new kind of infrastructure is required to deal with the huge number of IoT connections initiated by sensors, vehicles, etc. In this context, Edge Computing is shaping the future IoT infrastructures. It provides nearby physical resources performing analytics tasks and thus taking the opportunity to capitalize on data.

Edge computing provides a number of benefits including enhanced network performances, lower operational costs, alleviated network congestion, improved survivability, etc. However, it raises new challenges in terms of devices deployment, applications monitoring, resources management, etc. The objective of this special issue is to capture the latest advances in this research field and merging standards.

The special issue seeks novel research contributions and experience papers tackling the challenges in these areas, including but not limited to:

- Architecture and protocols based on edge computing in IoT
- Edge computing infrastructure and middleware solutions in IoT
- Data collection and transmission mechanisms to edge devices
- QoS enhancement in edge computing
- Real-time analysis of data
- Analytics and machine learning for edge computing
- Resources monitoring and utilization mechanisms
- Resources allocation algorithms in edge computing for IoT
- Resources management in edge computing for IoT
- Iot traffic characterization
- Software Defined Networking for IoT
- Programming models and programmability
- Service discovery and synchronization
- Security and privacy
- Modeling and simulation of large-scale edge computing for IoT scenarios
- Testbed, prototypes, and practical systems for edge computing in IoT

Guest Editors
- **Ilhem Fajjari, Orange Labs, France**
- **Fouad Tobagi, Stanford University, USA**
- **Yutaka Takahashi, Kyoto University, Japan**

Papers must be written in English and describe original research not published or currently under review by other journals or conferences. The length of the article file should not exceed 35,000 characters including spaces (i.e., around 5,500 words). The manuscripts that are outside the expected length are likely to be rejected. All relevant papers submitted will go through an external review process. If a paper has been published partially in a conference, the authors should specify the added value of the journal paper comparing to the conference. Moreover, the submitted paper must contain at least 30% of novelty Submissions should be sent according to the instructions available at:
http://annalsoftelecommunications.wp.mines-telecom.fr/how-to-publish/. The authors must directly submit their papers at: https://www.editorialmanager.com/ante/default.aspx and select the relevant CfP.

Proposed schedule
- **Manuscript submission** ~~April 15, 2017~~ **Extended May 9th, 2017**
- **Notification of acceptance (after revision)** September 30, 2017
- **Online with DOI** As soon as accepted
- **Printed issue** Januray-April 2018