

Special Issue on  
**Fog-Cloud Computing Cooperation**

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In recent years, an unprecedented volume of data (called big data), supported by the development of wireless and mobile communication technologies, comes from Internet of Things (IoT) devices and sensors and requires deeply involved activities of acquisition, storage, and processing. Such a context is commonly referred to as fog computing. This paradigm is located closer to IoT devices and sensors providing an extension for the cloud computing approach. This extension should be understood as powerful complement cooperation in terms of computing, storage, and communication facilities.

Several new opportunities and challenges emerge from the scenario of fog-cloud computing cooperation. Some examples of those aspects, related to this collaboration (and not limited to), are communication delays, context-aware applications, deep learning, dependability, interfaces, mobile applications software engineering, peer-to-peer processes communication, power consumption, privacy, programming models, QoE, QoS, radio access techniques, security, SDN, services shared, and services workload offloading.

Therefore, in this special issue we are calling for cutting-edge research works related to the topic fog-cloud computing cooperation.

Potential topics include but are not limited to the following:

- ▶ 5G Internet of Things (IoT)
- ▶ Accounting, billing, and monitoring in fog-cloud cooperation
- ▶ Cloud-fog computational offloading
- ▶ Communication challenges in fog
- ▶ Context-aware fog mobile applications
- ▶ Data acquisition, processing, and storage in fog
- ▶ Dependability in fog environments
- ▶ Fog architectures and applications
- ▶ Fog mobile applications software engineering
- ▶ Mobile communications issues in fog environments
- ▶ Peer-to-peer process mobile communication in fog and cloud
- ▶ Power consumption in fog and cloud
- ▶ Privacy in fog
- ▶ Programming models for mobile fog computing
- ▶ QoE and QoS in mobile fog environments
- ▶ Radio access techniques enhancing fog infrastructure
- ▶ Security in fog-cloud cooperation
- ▶ Services discovery, shared and workload offloading in cloud-fog cooperation
- ▶ SDN supporting fog infrastructure
- ▶ Time-constraints for fog mobile applications

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Papers are published upon acceptance, regardless of the Special Issue publication date.

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**Submission Deadline**

Friday, 21 December 2018

**Publication Date**

May 2019