Services and Computing in Edge Computing

Edge computing, a new paradigm that extends cloud computing and services to the edge of network, meets the enhanced requirements of low latency, location awareness and mobility support. The edge of network is located just one wireless hop away from associated end nodes, such as mobile devices, sensors and end users. Services are hosted at the edge of network, consequently, this reduces service latency, improves quality of service and provides a superior experience for end users. Hence, edge computing offers ideal placement for low-latency offload infrastructure to support emerging applications that demand real-time or predictable latency, such as vehicle automation, augmented reality and wearable cognitive assistance. Moreover, due to the capability to support a wide geographical distribution, edge computing is well positioned for big data aggregating, analyzing and distilling bandwidth-hungry sensor data from devices. In the Internet of Things, edge computing offers a natural vantage point for organizational access control, administrative autonomy and responsive analytics. In vehicular systems, edge computing marks the junction between a moving vehicle and the cloud. Edge computing-enabled 5G radio access networks can improve network performance, enable direct device-to-device wireless communications and support the growing trend of network function virtualization.

Despite the several advantages, realizing edge computing imposes many new challenges. For example, how to compose, deploy and manage distributed edge services, how to enable highly scalable and manageable edge computing, how should the edge interact with the cloud, and how to enable users to control their edge services provided by edge operators. Addressing these challenges necessitates rethinking of the key requirements and potential opportunities for services and computing in edge computing. This special issue aims to bring together researchers to publish state-of-art research findings of services and computing in edge computing. We are seeking new and unpublished work in the domain of services and computing in edge computing. More specifically, this special issue will focus on recent developments in edge computing:

The list of topics includes, but is not limited to:

- Edge computing infrastructure and applications for services
- Edge computing resources allocation and management for services
- Edge-based real time applications and quality of service
- Load balancing and service selection/composition at the edge
- Admission control for services in edge computing
- Pricing and billing models for services in edge computing
- Deployment strategies of edge services
- Service interactions between the edge and the cloud
- Services and computing in edge-based radio access networks

Important Dates

Aug 31, 2016: Deadline for paper submission

Oct 15, 2016: Initial decision notification

Nov 30, 2016: Revised submissions due

Dec 31, 2016: Second-round decision notification

Jan 15, 2016: Final decision notification

Jan 31, 2017: Camera-ready version due

Submission Guidelines

Your papers should be submitted to sgwang@bupt.edu.cn. Paper formatting guidelines are available at the journal website (http://www.inderscience.com/jhome.php?jcode=ijwgs). Submitted papers should not have been previously published nor be currently under consideration for publication elsewhere.

Guest Editors

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