

**IEEE HPSR 2019 Workshop**  
**“Fog computing and caching for the Future networks”**  
**Call for Papers**



**IEEE 20<sup>th</sup> International Conference on  
High Performance Switching and Routing**  
(<http://www.ieee-hpsr.org/>)

To satisfy the explosively increasing demands of high-speed data applications and massive access requirements of various mobile devices, a whole package of performance requirements has been proposed for the fifth-generation (5G) mobile communication system. In particular, 5G should be able to connect one million connections per square kilometer, and the system capacity will grow by a factor of 1000 compared to the fourth-generation (4G) system to deliver a consistent experience across a variety of scenarios.

Cloud Computing is a new paradigm in Information Technology (IT) and IT-enabled services (ITES) that transforms “computing as a resource” to “computing as a service”. However, since cloud computing is not enough to deal with the large amount of data generated by increasing number of connected Internet-of-Things (IoT) devices, and in order to better support time dependent, location dependent, massive scale, and latency sensitive applications, fog computing is proposed as a possible solution. According to its definition, fog computing is a horizontal, system-level architecture that distributes computing, storage, control and networking functions closer to the users along a cloud-to-thing continuum. Hence, fog computing can be regarded as an extension of the traditional cloud-based computing model, which allows computing need to be performed closer to the source of data.

This workshop provides a forum for discussions of the up-to-date developments in information-centric networking, fog computing, edge computing, edge caching for future networks, and brings academic researchers and industry developers together.

[Topics of interests]

- Information-centric networking modeling and analysis of integrating communication, computation and caching
- Trends and challenges of integrating information-centric networking, fog computing, and caching
- Network architecture and protocol design for artificial intelligence (AI)-enabled fog computing
- Mobile cloud/fog computation offloading in fog computing enabled wireless networks
- Content caching and optimization in future networks
- QoS provisioning, resource management and cross-layer design
- Network security for fog computing and caching

## **Workshop Organizers**

Fan Jiang, Xi'an University of Posts and Telecommunications, [jiangfan@xupt.edu.cn](mailto:jiangfan@xupt.edu.cn)

JunXuan Wang, Xi'an University of Posts and Telecommunications, [wangjx@xupt.edu.cn](mailto:wangjx@xupt.edu.cn)

Changyin Sun, Xi'an University of Posts and Telecommunications, [changyin\\_sun@163.com](mailto:changyin_sun@163.com)

Yuan Ren, Xi'an University of Posts and Telecommunications, [renyuan1296@163.com](mailto:renyuan1296@163.com)

## **Important Days**

**Workshop paper submission due:** **April 05, 2019**

Workshop acceptance notifications: April 15, 2019

**Workshop camera ready submission due:** **April 26, 2019**

Workshop author registration due: April 26, 2019

Workshop date: May 29, 2019

## **Paper Submission Guidelines**

Accepted papers will be included in the IEEE HPSR 2019 Workshop Proceedings, as well as in IEEE Xplore.

Submitted papers must be unpublished and should not be submitted elsewhere at the same time. Accepted papers should not exceed 6 pages in two-column IEEE Transactions style. Accepted papers longer than 6 pages will be charged for each extra page. Papers cannot be longer than 8 pages. Papers should be submitted as PDF files through the EDAS system. All submitted papers will be subject to three independent reviews.

Papers can be registered by accessing EDAS or by using the following direct link: <https://edas.info/N25978>. Authors can choose one of the three workshops by clicking on the title on a paper registration/submission page.

Top scored papers will be invited to submit an extended version of their work to a Special Issue of the Elsevier Journal of Optical Switching and Networking (OSN).

## **Author Registration for HPSR Workshop:**

There is a single type of registration for all attendees, comprising tutorials, main conference, and workshops. **To upload the final version of an accepted paper, one author is required to register for HPSR. One full registration to HPSR is sufficient to present two papers accepted at the workshops or at the main conference.** The paper will be included in the Workshop Proceedings and will be published on IEEE Xplore provided that it will be presented by an author of that paper at the workshop.

For more information, please visit

<http://hpsr2019.ieee-hpsr.org/authors/papers-submission-guidelines-workshops/>

