Call for Papers

Selected Areas in Communications Symposium

Cloud and Fog/Edge Computing, Networking and Storage Track

Track chairs

- Jeongseok Ha, KAIST, Korea
  jsha@kaist.edu
- Marcelo Marotta, Universidade de Brasília, Brazil
  marcelo.marotta@unb.br

Scope and Topics of Interest

This track covers all essential aspects of the storage, networking and computing of data for cloud, fog and edge computing. Cloud computing is making the storage and processing of data scalable, flexible and easy to use. Fog computing and edge computing are making the storage and computing closer to edge devices, enabling Internet of Things (IoT) and many other applications. There are many important technical challenges, including reliable distributed storage for both big data applications and small devices, high-speed networking in complex and heterogeneous environments, information processing and computing with varied quality requirements, algorithms and protocols for better system integration and computing service, the support for emerging applications including (but not limited to) Internet of Things, Artificial Intelligence, Augmented Reality, Blockchain, Big Data, Robotics, and more.

Original research contributions are solicited for this important area. This track aims at bringing together the efforts of the academia and the industry to improve information systems in significant ways. Theory, algorithms and system technologies that can substantially impact existing cloud, fog, edge computing systems or lead to novel future developments are particularly encouraged. The organizing committee solicits original contributions on any topic related to data storage, networking and computing for cloud, fog and edge computing, including (but not limited to):

- Cloud and fog computing for Internet of Things
- Cloud-based storage platforms
- Cloud data center architecture and networking
- Cloud federation, bridging and bursting

- Cloud-hosted blockchain infrastructure and services
- Cloud management, orchestration and automation
- Cloud traffic characterization
- Coding theory for data storage and transmission
- Data analytics for distributed computing and IoT
- Data storage channels and distributed storage networks
- Data storage in current and emerging non-volatile memories
- Decentralized storage in cloud and fog/edge computing systems
- Distributed storage for cloud and fog/edge computing
- Elasticity and scalability of cloud resources
- Emerging storage media: MRAM, RRAM, PCM, etc.
- Intra and inter-cloud networking
- Mobile networking and computing for cloud and fog/edge computing
- SDN-enabled cloud data centers
- Security and privacy in the cloud and fog/edge infrastructure, services and storage
- Serverless computing and FaaS
- Software defined storage
- Virtualization of storage, networking and computing

Submission Guidelines

The IEEE ICC 2020 website (icc2020.ieee-icc.org) provides full instructions on manuscript format and how to submit a manuscript. You will select the desired symposium/track when submitting your manuscript.