Call for Papers

Track 2 – Cloud & Fog Computing and Networking

Track Chairs:

Angelos K. Marnerides, Lancaster University, UK
Dimitrios P. Pezaros, University of Glasgow, UK

Scope and Motivation:

The advent of Cloud computing as a cost-effective and reliable service delivery platform has resulted in a paradigm shift in how compute and storage resources are provisioned and managed at scale. At the same time, the physical locations of service facilities, and the virtualization of hardware and software elements are stressing the communication networks both within and across data centers, especially when these are interconnected over wide-area networks. For these reasons, more recently, the concepts of Edge and Fog computing have been gaining traction in an effort to meet the stringent latency requirements of future and 5G applications such as, e.g., VR, remote controlling of autonomous processing platforms, and multimedia streaming, while maintaining the benefits of resource sharing, virtualization, and elastic provisioning. In this complex environment, there is a plethora of currently open challenges relating to the computing as well as the communications and networking aspects of elastic resource provisioning over Cloud and Fog/Edge infrastructures such as, e.g., Cloud/Fog network management, traffic engineering, resource consolidation and related issues, and novel technologies and protocols paving the way to the emergence of new advanced Cloud and Fog services. The "Cloud & Fog Computing and Networking Track" aims to address these aspects.

Main Topics of Interest:

The Cloud & Fog Computing and Networking track seeks original contributions in the following areas, as well as others that are not explicitly listed but are closely related:

- Data Center Network Management
- Optimization and Virtual Embedding
- Distributed and Wide-Area Data Center Architectures, and Reliability
- Cloud Network Operating Systems
- Software-Defined Networking and Protocols
- Cloud Traffic Characterization and Measurements
- Intra-Cloud and Inter-Cloud Management
- Cloud Traffic Engineering and Control-Plane Architectures
- Data centers and infrastructures for Fog/Edge computing
- Applications for Fog/Edge computing
- Fog/Edge Analytics
- Monitoring and Measurements over Cloud and Fog/Edge infrastructures
- Mission-Critical Edge Computing
- Hybrid Clouds in Edge Computing
- Mobile Cloud Networking

- Content and Service Distribution over Cloud and Fog/Edge computing environments
- Information Centric Networking over Cloud and Fog/Edge computing environments
- Security, Privacy, Confidentiality in Cloud and Fog/Edge computing environments
- Green Cloud/Fog Networking
- Network Function Virtualization
- Routing over Cloud/Fog computing environments
- Resource management and reliability for Edge Computing
- Availability in Edge Computing Systems
- Quality of Service in Edge Computing
- Virtualization management in Cloud and Edge/Fog computing environments
- IoT Edge Computing

Please visit http://ccnc2019.ieee-ccnc.org/authors for information on Paper Submission Guidelines and Author Requirements.