



## **Call for Papers for *Communications QoS, Reliability and Modeling Symposium***

### **Scope and Motivation:**

Provisioning and improving quality of service (QoS) has been one of the key objectives in designing networks and communications systems. There have been more than two decades of extensive research activities on a series of topics related to QoS provisioning including traffic modeling, resource allocation, network monitoring, and service management. Advances in networking and communications technologies are transforming the networking infrastructure into a highly heterogeneous large-scale entity, thus presenting new challenges and captivating much interest in provisioning QoS in such networking environment. For example, communication networks based on different technologies need to cooperate with each other for end-to-end QoS provisioning and to support a wide range of bandwidth intensive multi-media applications and services for a large number of clients. Furthermore, they should be capable of supporting user roaming and mobility. Such transformation incurs fundamental challenges on traditional theories, analyses, modeling and experimenting methods.

This symposium emphasizes advances in the design, resource allocation, traffic control, and performance evaluation required to deliver quality services in the transformed networking infrastructure reliably. The symposium will provide an international technical forum for experts from industry and academia to exchange ideas and present results of ongoing research on the challenging issues related to the requirements, metrics, measurement, management, and dissemination, modeling as well as performance evaluation of emerging network services.

This symposium solicits papers that describe original and unpublished contributions addressing various aspects of QoS, reliability and performance modeling in computer and

telecommunication networks. Authors are invited to submit original technical papers covering but not limited to the topics of interest listed below.

## **Topics of Interest**

The Communications QoS, Reliability and Modeling Symposium seeks original contributions in, but not limited to, the following topical areas:

- Quality in Multimedia Networks including Voice over IP and IPTV
- Quality, Scalability and Performance in the Internet
- Quality and Performance in Wireless and Mobile Networks
- Quality, Reliability and Performance in Optical and Multi-layer Networks
- Quality and Performance in Autonomic Systems
- Quality and Performance in Grid, Distributed and Cloud Computing
- Quality and Performance in Overlay (including Peer-to-Peer) Networks
- Quality and Performance for Network and Services
- Quality and Resource Allocation for Network Services, VPN, Web
- Performance Modeling of Next Generation Networks
- Performance of Large Scale Experimental Platforms
- Scalability, Robustness and Resilience
- Standardization Aspects of QoS and Reliability
- Performance Evaluation Techniques
- TCP/IP Performance
- Design of Networks and Network Services
- Cross-layer Design, Modeling and Optimization
- Application / Service Oriented Networking
- Network Simulation Techniques
- Network Modeling
- Network Measurement and Monitoring Techniques
- Resource Allocation for Networks and their services
- Traffic and Workload Modeling and Characterization
- Traffic and Workload Control
- Traffic Economics
- Traffic Engineering and Traffic Theory
- Metrics and Models for Quality of Experience (QoE)