



## Communication QoS, Reliability and Modeling Symposium

### SYMPOSIUM CHAIRS AND CO-CHAIRS:

Xianbin Wang, Western University, Canada, xianbin.wang@uwo.ca

Hidenori Nakazato, Waseda University, Japan, nakazato@ieee.org

Melike Erol-Kantarci, University of Ottawa, Canada, melike.erolkantarci@uottawa.ca

### SCOPE AND MOTIVATION

With ongoing evolution and integration of 5G, Internet of Things (IoT), and vertical applications, we are quickly leaping forward to a ubiquitously connected society where communications for human and machine intelligence is becoming a key enabler. In modern communication infrastructure, different networks need to co-exist for end-to-end quality of service (QoS) provisioning in a wide range of applications with a huge number of endpoints represented not only by humans, but more and more by things and machines interconnected to each other and to data centers. The Communication QoS, Reliability and Modeling (CQRM) Symposium aims at providing an international venue for the discussion of research advances in communications service provisioning, quality of service/experience technologies, and analytical and experimental techniques to allow the design of communication networks as a reliable information infrastructure with QoS capability. The scope of this symposium is agnostic to network technologies. Specifically, the goal is to address the key challenges to provide the required level of QoS, security and reliability to coexisting networks that are heterogeneous in nature, in size, and in the type of information transmitted.

### TOPICS OF INTEREST

Topics of interest for the CQRM Symposium include, but are not limited to:

- Metrics and Models for Quality of Experience (QoE) and Quality of Service (QoS)
- QoS provisioning in machine communications
- Design and Evaluation of Energy Efficient Networks and Services
- Design and Evaluation of Software Defined Networking (SDN) Architectures and Networks
- Design and Evaluation of Application / Service Oriented Networking
- Cross-layer Design, Modeling and Optimization
- Design and Evaluation of Content Distribution Networks (CDNs)
- Design and Evaluation of Smart Cities
- Design of Networks and Network Services
- Cooperative Networking and Unified Management of Connectivity
- Tradeoff Between Performance and Energy Efficiency in Network Design
- Design of network architectures/technologies for ubiquitous 5G multitenant networks
- Performance Evaluation Techniques
- Quality and Performance for Network and Services
- Quality, Scalability and Performance in the Internet



Quality, Reliability and Performance in Optical and Multi-layer Networks  
Quality and Performance in Autonomic Systems  
TCP/IP Variants and Performance  
Multimedia Streaming, Adaptive Streaming, MPEG-DASH  
Quality and Efficiency for Web browsing, HTTP 2.0  
Quality in Multimedia Networks including Voice over IP and IPTV  
Quality and Performance in Wireless and Mobile Networks  
Wireless and Mobile Networks Performance  
Modeling and Performance of 5G wireless radio networks  
Performance of Mobile Cloud Networks  
Modeling and Performance of Socially-Aware Wireless and Mobile Networks  
Performance and Efficiency of Energy Harvesting  
Network Measurement and Monitoring Techniques  
Network Measurement for Smart Cities and Internet of Things (IoT)  
Network Simulation Techniques  
Measurement and Evaluation Techniques of Energy Efficient Communication Systems  
Performance Evaluation and Design of Cognitive Network Architectures  
Performance Evaluation and Integration in Smart Grids Communications and Demand Response Techniques  
Performance Evaluation and Design of Connected Autonomous Electric Vehicles  
Network Traffic Characterization and Measurement  
Machine Learning and Artificial Intelligence for Traffic and QoE Management  
Performance evaluation of machine learning based techniques for communications and networks  
Performance evaluation of new RAN architectures  
Integrated Multitenant 5G Platforms  
Quality and Performance in Grid, Distributed and Cloud Computing  
Quality and Performance in Overlay (including Peer-to-Peer) Networks  
Quality and Resource Allocation for Network Services, VPN, Web  
Performance Evaluation and Design of Cloud Networks  
Performance Evaluation and Design of Vehicular Cloud Networks  
Resource Allocation for Networks and Their Services  
Software-Defined Networking (SDN) and Network Functions Virtualization (NFV)  
Quality and Performance in Mobile Edge and Fog Computing Systems  
Quality, Measurements and Performance in IoT and Big Data Applications  
IoT Platforms, Integration and Service Provisioning  
Design and Scalability of Smart Cities and Crowd Sensing Applications  
Quality, Measurements and Performance in Cyber Physical Systems  
Scalability and Performance of Edge Computing and Distributed Computing Systems  
Integration of Objects, Devices and Systems in an IoT Environment  
Security, Reliability, Privacy and Trust by Design and Performance Evaluation  
Scalability, Robustness and Resilience  
Integration of Behavioral (or Soft) Biometrics into IoT Environments  
Standardization Aspects of QoS and Reliability  
Dependable Communication Networks



## IMPORTANT DATES

**Paper Submission:** 15 April 2020

**Notification:** 25 July 2020

**Camera Ready and Registration:** 1 September 2020

## SUBMISSION INSTRUCTION

All papers for technical symposia should be submitted via EDAS through the following link: <https://edas.info/N27054>