



# IEEE Global Communications Conference

7-11 December 2021 • Madrid, Spain

*Connecting Cultures around the Globe*

## Call for Papers

### Communication QoS, Reliability, and Modeling Symposium

#### **SYMPOSIUM CHAIRS AND CO-CHAIRS**

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#### **SCOPE AND MOTIVATION**

With the recent advance and evolution of 5G and Internet of Things (IoT) technologies and their integration into vertical applications, we are swiftly leaping forward to a ubiquitously connected society where communications for human and machine intelligence are becoming a key enabler. In modern communication infrastructures, different networks need to co-exist for end-to-end quality of service (QoS) provisioning for a wide range of applications with a huge number of endpoints, which are represented not only by humans, but more and more by things and machines interconnected to each other and, through IoT networks, to data centers. The Communication QoS, Reliability and Modeling (CQRM) Symposium aims at providing an international venue for the discussion and presentation of original ideas and research advances in support of multimedia applications, quality of service/experience provisioning, as well as analytical and experimental approaches to the design and evaluation of communication networks as a reliable information infrastructure. The scope of this symposium is agnostic to network technologies. Specifically, the goal is to address the key challenges and propose solutions for providing the required level of QoS, reliability and connectivity to co-existing 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 for Massive Machine-Type Communications and in IoT Networks
- Design and Evaluation of Energy Efficient Networks and Services
- Design and Evaluation of Software Defined Networking (SDN) and Network Function Virtualization (NFV)
- Design and Evaluation of Application/Service Oriented Networking
- Cross-layer Design, Modeling and Optimization
- Performance Evaluation Techniques including Modeling, Simulations and Testbeds
- Quality, Scalability and Performance in the Internet and Massive IoT Networks
- Quality, Reliability and Performance in Optical and Multi-layer Networks

- Multimedia Streaming, Adaptive Streaming, MPEG-DASH, and HTTP 2.0
- Quality in Multimedia Networks including VoLTE, VoNR, IPTV, and Gaming
- Quality and Performance in Beyond 5G Wireless and Mobile Networks
- Network Traffic Characterization, Measurement and Monitoring Techniques
- Design and Performance Evaluation of AI/ML-enabled Networks
- Performance Evaluation and Integration in Smart Grids Communications and Demand Response Techniques
- Protocol design and Performance Evaluation of New RAN Architectures
- Design and Integration of Multi-domain Multi-tenant 5G Platforms
- Quality and Performance in Grid, Distributed and Cloud Computing
- Quality and Performance in Overlay (including Peer-to-Peer) Networks
- Design and Performance Evaluation of IoV and V2X Networks
- Network Slicing and Resource Allocation for Radio Access and Core Networks
- Quality and Performance of Multi-access Edge Computing (MEC) and Fog Computing Solutions
- Quality, Measurements and Performance in IoT and Big Data Applications
- IoT Platforms, Integration and Service Provisioning
- Design and Scalability of Smart City, Smart Home and Crowd Sensing Applications
- Quality, Measurements and Performance in Cyber Physical Systems
- Integration of Objects, Devices and Systems for Industry 4.0 and Society 5.0 Applications
- Security, Reliability, Privacy and Trust by Design and Performance Evaluation
- Scalability, Robustness and Resilience
- Standardization Aspects of QoS and Reliability
- Dependable Communication Networks for Achieving URLLC
- Formal Verification Methods for QoS and Reliability
- Innovative Modeling Techniques for Large Scale and Emerging Network Technologies

## **IMPORTANT DATES**

Deadline for paper submission: 15 April 2021

Date for notification: 25 July 2021

Deadline for final paper submission: 1 September 2021

## **SUBMISSION INSTRUCTIONS**

All papers for technical symposia should be submitted via EDAS through the following link

<https://edas.info/newPaper.php?c=27503&track=102705>