





IEEE Global Communications Conference 9-13 December 2018 Abu Dhabi, UAE Gateway to a Connected World



# Call for Papers Communication Software, Services, and Multimedia Application Symposium

Symposium Co-Chairs

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# **Scope and Motivations**

IEEE GlobeCom 2018 will be held at *Abu Dhabi*, UAE, 9-13 December 2018. It will exhibit an exciting technical program including 12 Symposia highlighting recent progress in all major areas of communications.

The Communication Software, Services, and Multimedia Application Symposium will provide a platform to present state-of-the-art research work on challenging issues related to software design, deployment, delivering, and management of services and multimedia applications. It will provide an opportunity for face-to-face discussions and information sharing among experts from both academia and industry.

# **Main Topics of Interest**

The Communications Software, Services, and Multimedia Application Symposium covers challenges and advances for Network Softwarization and Enablers, service delivery, management, and multimedia applications in fixed and mobile communication networks. The Symposium solicits original contributions in, but not limited to, the following topical areas:

#### • Network Softwarization & Services

- Network function virtualization
- Service function chaining
- o Resource sharing & isolation
- Software defined networking
- Virtualization technologies/techniques
- o (mobile/multi-access) edge and fog computing
- o MEC-, SDN-, NFV-based network services
- o Service, slice, and infrastructure monitoring
- o Performance, interoperability, and scalability challenges/issues
- Security and privacy issues in virtualized environments
- Mobile core networks and their slicing
- o Slice programmability, modeling, composition algorithms and deployment
- o Network/service orchestration and management
- o Experimental testbeds, trials and deployment
- o Business models & new verticals







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#### • Architecture for Next Generation Services

- o Architectures for digital media ecosystem: from producer to consumer
- o Architecture of content generation and adaptation
- o Internet digital media ecosystem
- o Scalable and network-aware digital media solutions
- Crowdsourcing services and platforms
- Social networking services and platforms
- o Home network services and platforms
- o Everything-as-a-Service model and delivery platforms
- o Scalable video delivery
- o Cooperative networking for streaming media content
- Service overlay networks

# • Quality in Services and Multimedia Applications

- o Quality of Experience (QoE) modelling and metrics
- Adoption of QoE metrics and models for assessment, control and management of multimedia services
- o Strategies of End-to-End QoE management
- o Quality-oriented routing algorithms
- Video quality assessment and impairment concealment
- o Performance studies of digital media ecosystem
- o High quality service provisioning for multimedia applications

# Multimedia Systems and Services

- Multimedia cloud services
- o Multimedia streaming, multicast and broadcast services
- Web Services and distributed SW technology
- o IMS and multimedia services o Home and entertainment digital media ecosystem
- o IPTV service and home networking
- o Triple and Quadruple play services
- o P2P and P2P-SIP services
- o Distributed systems and applications, including Grid Services
- o Convergence of communication and global services
- o Communications software in vehicular communications
- o Architectures for cooperative communications and ubiquitous computing

#### • Service Management

- o Security and privacy in network and service management
- Scalability and reliability issues
- o Charging, pricing, business models
- Context awareness and personalization
- Next generation services and emerging threats
- o Cross-layer optimization for multimedia service support





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# **Sponsoring Technical Committees**

Communications Software (TCCS) Multimedia Communications (MMTC)