

IEEE Global Communications Conference

4-8 December 2022 – Rio de Janeiro, Brazil

Accelerating the Digital Transformation through Smart Communications



CALL FOR PAPERS AND PROPOSALS

Next Generation Networking and Internet Symposium

Symposium Co-Chairs

- Lotfi MHAMDI, Leeds University (UK), L.Mhamdi@leeds.ac.uk
- Qi Li, Tsinghua University (China), qli01@tsinghua.edu.cn
- Selma Boumerdassi, CNAM (FR), selma.boumerdassi@cnam.fr

Scope and Motivation

Recent years are witnessing unprecedented advances in next generation Internet-networking research that has to deal with many innovations triggered by high-performance computing, programmable network equipment, and computing-harvesting next generation services. Leveraging three enablers, namely Software-Defined Networking (SDN), Network Function Virtualization (NFV), and Mobile Edge Computing (MEC), communication networks can be more agile handling network functions implemented as virtualized machines. Communication devices can also host very advanced applications, and datacenters can be pervasively distributed down to network access points. Many salient issues are affecting next-generation networks, such as, network densification, network slicing, mobile cloud computing, mobility management, cross-layer activities, self-organization, security, performance predictability, and energy efficiency operations.

The Next Generation Networking and Internet (NGNI) Symposium at IEEE Globecom 2022 aims at consolidating and disseminating the latest developments and advances in these emerging focus areas. This symposium invites participation from academic, industry, and government researchers working in the broad area of next-generation networking and Internet, including methodologies, techniques, technologies, theories, services, architectures, and protocols. The NGNI Symposium will provide a forum for researchers to get together, to present a latest snapshot of the cutting-edge research, and to foster technical debate on future directions in this exciting area.

Topics of Interest

The Next Generation Networking and Internet (NGNI) Symposium seeks original contributions in the following topical areas, plus others that are not explicitly listed but are closely related:

- Addressing and naming with the presence of mobility and portability
- Centralized-RAN, Cloud-RAN, and Fog-RAN architectures

- Cloud-based networking
- Content-centric networking: caching, naming, distribution, load balancing, resiliency, traffic engineering, and congestion control
- Converged networks and applications, including NGN telecom converged management mechanism for RAN and mobile backhaul
- Data center network architectures and performance
- Energy-efficient green communications
- Future Internet and next-generation networking architectures
- Heterogeneous multi-layer and multi-domain wireless-wireline internetworking
- High speed and parallel processing architectures for next generation routers and switches
- Internet economics, pricing, accounting, and growth modelling
- Internet of Things (IoT), M2M, D2D, MTC
- Internet survivability and network resilience strategies
- Mobile Cloud Computing (MCC) and Multi-access Edge Computing (MEC)
- Mobile security: device, application, and data
- Mobile/wireless content distribution
- Network and service virtualization
- Networking for Cloud and Fog computing
- Network Slicing
- Next-generation access networking
- Next-generation anomaly, intrusion, and attack detection/prevention

Important Dates

Paper Submission: 15 April 2022

Notification: 25 July 2022

Camera Ready and Registration: 1 September 2022

How to Submit a Paper

All papers for technical symposia should be submitted via EDAS. Full instructions on how to submit papers are provided on the IEEE Globecom 2022 website: <https://globecom2022.ieee-globecom.org/>