



IEEE International Conference on Communications
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Empowering Intelligent Communications

CALL FOR PAPERS NEXT GENERATION NETWORKS AND INTERNET (NGNI) SYMPOSIUM

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Scope and Topics of Interest

We are witnessing an exciting period in next generation Internet-networking research that has to deal with many innovations triggered by high-frequency computing network equipment and computing-harvesting next generation services. Thanks to the huge enhancement of computing processor and interface architectures, communication networks can now handle network functions implemented as virtualized machines making large use of software elements. Communication devices can now host very advanced applications, and data-centers can be pervasively distributed down to network access points. Networks, applications and clouds control layers can so leverage on advanced decision-making solutions to target full automation in Internet and next-generation service delivery, with unprecedented awareness on changing user and network states. Topics of interest include (but are not limited to):

- Network Functions Virtualization: placement, chaining, security, availability;
- Centralized-RAN and Cloud-RAN architectures;
- Cloud networking;
- Internet economics, pricing, accounting, and growth modelling;
- Content-based networking: caching, naming, distribution, load balancing, resiliency;
- Converged networks and applications;
- Free space optical (FSO) networks and Visible light communication (VLC);
- Software Defined Radio (SDR) and Cognitive Radio networks
- 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;
- Packet classification and forwarding mechanisms at ultra-high link rates (terabits)
- Next-generation Internet applications and services, including interactive media, voice and video, games, and immersive applications

- Indoor localization and navigation;
- Internet of Things (IoT), M2M, D2D, MTC;
- Internet survivability and network resilience strategies;
- Mobile and multi-access cloud/edge networking;
- Mobile security: device, application, and data;
- Vehicular networks;
- Network and service virtualization;
- Next-generation IP multimedia subsystem: architecture and design;
- Next-generation access networks;
- Next-generation anomaly, intrusion, and attack detection/prevention;
- Next-generation flow management: resource sharing, congestion control;
- Quality of Service (QoS) and Quality of Experience (QoE) in next-generation networks;
- Next-generation network management and control;
- Overlay and peer-to-peer (P2P) networking
- Software Defined Networking (SDN)
- Traffic measurement, analysis, modelling, visualization, and engineering
- Network artificial intelligence applications
- Network data analytics
- 5G architecture: protocols, scheduling, slicing, resource allocation
- Blockchain applications to network/cloud control and Internet registries

Submission Guidelines

The IEEE ICC 2019 website provides full instructions on how to submit papers and the paper format. You will select the desired symposium when submitting papers.

The paper submission deadline is October 14, 2018.

Only PDF files will be accepted for the review process and all submissions must be done through EDAS at <http://edas.info/>