



IEEE Latin-American Conference on Communications 2022
30 November to 02 December 2022
Rio de Janeiro, Brazil

IEEE LATINCOM 2022 CALL FOR PAPERS

The LATINCOM 2022 Organizing Committee is inviting submissions of original, unpublished, high-quality research papers focused on (but not limited to) the following topics of interest:

Mobile and Wireless Networking

- Cellular systems, 4G/5G/B5G/6G
- Cognitive radio networks
- Device-to-device/machine-to-machine communications
- Green wireless networks
- Large-scale LEO satellite networking
- Opportunistic wireless networks
- Pervasive and wearable computing and networking
- Reconfigurable wireless networks
- Software-defined wireless networks
- Underwater wireless networks
- Vehicular networks
- UAV
- Wireless network virtualization
- Wireless multimedia networks
- WLAN, WPAN, and other home/personal networking technologies
- Wireless networking techniques based on AI

Communication Services, Software and Multimedia Applications

- Cooperative networking for streaming media content
- E-health, E-governance, E-agriculture, etc.
- High quality service provisioning for multimedia applications
- Location-based services
- ML techniques for video delivery and service
- ML techniques for multimedia content analysis
- Multimedia cloud, streaming, multicast and broadcast services
- Multimedia fog/edge computing and communication
- QoE and QoS
- Quality-oriented routing algorithms
- Real time communication services

- Service orchestration and management
- Service security and privacy
- Triple and quadruple play services

Communication QoS, Reliability and Performance Modeling

- Networks and communication systems modeling
- Networks and communications performance evaluation
- Reliability of systems and networks
- Traffic measurement, modeling, visualization, and engineering
- Security and trust in network design
- Integration aspects in IoT and Big Data systems
- Design of cloud, edge and other distributed computing networks
- QoS and network efficiency

Optical Networks

- AI and ML for optical systems and networks
- Big data driven optical networking
- Data analytics for optical networks
- Elastic, flexible rate and flexi-grid optical networks
- Free-space optical networks
- Optical network control and management
- Optical network survivability and availability
- Optical vehicular networks
- Optical and wireless convergence
- Routing and spectrum assignment for optical networks
- Software defined optical networks
- Ultraviolet communications and networks
- Underwater optical communications
- Virtualization and slicing in optical networks
- Visible light communications

Communications Theory & Signal Processing

- Communication theory of ad-hoc and sensor networks
- Communication theory of distributed and edge computing
- Communication theory of networks and cross-layer design
- Multi-antenna, multi-user and multi-node systems
- Radio communications
- Satellite & space communications
- Signal processing techniques in 5G/B5G/6G
- Signal processing for QoS and QoE based applications
- Signal processing for smart grid and green communications
- Signal processing for sensor networks and IoT
- Signal processing for software defined and cognitive radio

- Signal processing for power line communications
- Signal processing for millimeter and tera-Hz communication
- Theoretical aspects of blockchain and ML in networks

Next-generation Networking and Internet

- 5G/B5G/6G architecture
- Blockchain in next generation communications and networks
- Content-centric networking
- Centralized-RAN and Cloud-RAN architectures
- Future Internet and next-generation networking architectures
- High speed architectures for next generation routers/switches
- Management of service-oriented control plane in 5G/B5G
- Network functions virtualization
- Next-generation access networks
- Next-generation anomaly-intrusion-attack detection/prevention
- Next-generation flow management
- Next-generation IP multimedia subsystem
- Next-generation network management and control
- Parallel architectures for next generation routers/switches
- Software-defined networking

AI, Big Data and ML for Networking

- AI and ML for 5G/B5G/6G and network slicing
- AI and ML for virtualized and software-defined networks
- AI, neural networks, and deep learning for network management
- Big data for smart cities and smart homes
- Big data for cloud computing and networking
- Big data for communications and networking
- Big data for smart grids
- Big data with IoT and cyber-physical systems
- Cloud and network data analytics, modeling and visualization
- Cooperative learning for software-defined and virtualized networks
- Data analytics for QoS and traffic classification
- Data analytics for faults and root-cause analysis
- Data-driven management of virtualized infrastructure
- Data-driven management of IoT and cyber-physical systems
- Data-driven management of SDN and data centers
- ML based distributed training and learning over-the-air
- Operational analytics and intelligence
- Predictive analytics and real-time analytics

Selected Areas in Communications

- Blockchain in communications and networks

- Cloud, fog and edge computing
- Internet-of-Things
- Smart cities and urban computing
- Smart grid communications
- Social networks, crowdsourcing, and crowdsensing
- Tactile Internet

Submission Format

Paper must be written in English, unpublished and not being considered in other conferences or journals. Full papers must be formatted as the standard IEEE double-column conference template and submitted in PDF on JEMS. Maximum 6 pages are allowed for each paper, including all illustrations and references.

Important Dates

- Paper submission deadline: ~~1 August 2022~~ **10 August 2022 (extended deadline)**
- Notification of acceptance: **6 September 2022**
- Camera-ready papers: **27 September 2022**
- Authors registration deadline: **27 September 2022**
- Conference dates: **30 November – 2 December 2022**

Publication Information

Accepted and presented papers will be published in the IEEE LATINCOM 2022 Conference Proceedings and submitted to IEEE Xplore as well as other Abstracting and Indexing (A&I) databases.