IEEE LATINCOM

IEEE Latin-American Conference on Communications
17-19 November 2021 // Santo Domingo, Dominican Republic

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Deadline: August 16, 2021

The IEEE Latin-American Conference on Communications (LATINCOM) is an international conference organized by the IEEE Communications Society (ComSoc) Latin America Region. IEEE LATINCOM is the most important conference on communications in Latin America; it is held annually and attracts submissions and participants from all around the world. This event will be an excellent opportunity to join together professors, researchers, industry and students.

This year, the 13th edition of the conference, LATINCOM 2021, will be held in Santo Domingo, Dominican Republic. A premier tourist destination, Santo Domingo is one of the most modern and dynamic metropolises in the Caribbean. It is a welcoming city where the old and the new converge seamlessly— from centuries old architecture and history to modern business districts, energetic cultural events, and a booming gastronomic scene.

We look forward to meeting you at Santo Domingo!

COVID-19 Update / Hybrid Conference Format:

Due to the on-going COVID-19 pandemic and the resulting travel restrictions, the conference will be in the form of a **hybrid conference** with some authors and participants attending the conference in person, and others attending remotely. The technical program will include physical sessions with on-site presentations and virtual (on-line) sessions for remote participants.

Conference Proceedings and Journal Special Issue
Accepted and presented papers will be published in the IEEE LATINCOM 2021 Conference Proceedings and submitted to IEEE Xplore® as well as other Abstracting and Indexing (A&I) databases. Authors of selected papers from LATINCOM 2021 will be invited to submit an extended version for possible publication in special issues of the following journals:
- International Journal of Network Management
- Journal of Communication and Information Systems

Call for Papers

November 17 – 19, 2021, Santo Domingo, Dominican Republic

The LATINCOM 2021 Organizing Committee is inviting submissions of original, unpublished, high-quality research papers focused on (but not limited to) the following topics of interest: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 modelling
– Networks and communications performance evaluation
– Reliability of systems and networks
– Traffic measurement, modelling, 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, modelling 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 JEM (https://submissoes.sbc.org.br/latincom2021). Maximum 6 pages are allowed for each paper, including all illustrations and references.

Call for Tutorials

The LATINCOM 2021 Organizing Committee is also inviting submissions of tutorials in the areas mentioned above. A tutorial proposal must be submitted in PDF format, containing the following information:

- Title of the tutorial
- Abstract, objectives and motivation
- Timeliness and intended audience
- Name, affiliation, and a short biography of each tutorial speaker
- A description of the technical issues that the tutorial will address, emphasizing its timeliness
- An outline of the tutorial content, including its tentative schedule. Please take under consideration the virtual manner of the conference when laying out the schedule
- If appropriate, a description of the past/relevant experience of the speaker on the topic of the tutorial.
- A description of previous tutorial experience of the speaker(s), and past versions of the tutorial

Tutorial proposals must also be submitted online via JEMS on the following link: https://submissoes.sbc.org.br/latincom2021

Important Dates

– Paper submission deadline: **August 16, 2021**
– Submission of tutorial proposals: **August 16, 2021**
– Notification of acceptance: **September 14, 2021**
– Camera-ready papers: **September 27, 2021**
– Conference dates: **November 17-19, 2021**

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