CALL FOR PAPERS

CINTI 2021

IEEE 21st International Symposium on Computational Intelligence and Informatics

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November 18-20, 2021

Óbuda University
Budapest, Hungary

Sponsored by:
IEEE Hungary Section
IEEE Joint Chapter of IES and RAS, Hungary
IEEE Computational Intelligence Chapter, Hungary
IEEE SMC Chapter, Hungary
IEEE Control Systems Chapter, Hungary

Technical Co-Sponsor:
IEEE Systems, Man, and Cybernetics Society

Organizers:
IEEE Hungary Section
Óbuda University
Hungarian Fuzzy Association

The Symposium is organized with the focus of bringing together scientists from all over the world working on computational intelligence and its applications with the aims at providing an opportunity for sharing and discussing the recent research developments in this field.

Venue

The Symposium will be held at Óbuda University (address: Bécsi út 96/b, H-1034 Budapest, Hungary).

Language

The official language of the Symposium is English. All the camera-ready manuscripts should be submitted in English.

Submission of Papers

There are invited and regular papers. Authors are kindly asked to submit their paper through electronic paper submission system on the website. Papers sent by e-mail are not acceptable.

Instructions for Authors

To reach the format of the final manuscript and instructions please log on to http://conf.uni-obuda.hu/cinti2021.

Author's Schedule

Full paper submission	August 20, 2021
Notification	September 22, 2021
Final manuscript submission	October 17, 2021

http://conf.uni-obuda.hu/cinti2021

IEEE/IFIP Network Operations and Management Symposium
25-29 April 2022 // Budapest, Hungary

◆IEEE | IEEE ComSoc™
IEEE Communications Society

CALL FOR PAPERS

The 18th IEEE/IFIP Network Operations and Management Symposium (NOMS 2022) will be held on 25-29 April 2022 in Budapest, Hungary. Held in even-numbered years since 1988, NOMS 2022 will follow the 34 years tradition of NOMS and IM as the primary IEEE Communications Society's forum for technical exchange on management of information and communication technology focusing on research, development, integration, standards, service provisioning, and user communities. The theme of NOMS 2022 is Management in the Age of Softwarization and Artificial Intelligence. It aims to capture recent results, emerging approaches and technical solutions for dealing with the management of Fixed and Mobile Networks and Services, Clouds, and Vertical Eco-Systems (e.g., smart cities and smart transportations). NOMS 2022 will offer various types of sessions: keynotes, technical, experience, demo, tutorial, poster, panel, and dissertation. Topics of interest include, but are not limited to, the following:

Management of 6G Networks and Network 2030
- Softwarization and management for extreme performance networking, such as very low latency and ultra-high peak data rate
- APIs, multi-domain orchestration, interoperability methods and algorithms for the softwarized networks and management in 6G
- Softwarization and management of the deterministic networks, of the high-precision networks
- Softwarization and management of the converged infrastructures: integration of data spaces with compute cloud networks and connectivity networks
- Methods/algorithms/APIs for control and management of addressing and routing for Network 2030
- Precision telemetry, Management of multi-domain services in 6G
- High-Precision networking services using Fog and Edge Computing
- Service assurance for precision micro services
- In-network service level optimization; predictable KPIs and QoS
- Management of Data Spaces, Management of Meta-data, Management of Data Identity
- Transition scenarios from existing networks to network 2030

Management of Smart Vertical Systems in the Industry 4.0 Era
- Smart Cities, Smart Grid, Smart Homes, Smart Environment, Smart Manufacturing, Smart Energy
- Internet of Things (IoT)
- 5G& 6G networking practices and principles
- Social Networks
- Cyber-Physical Systems including techniques supported with Augmented Reality, Virtual Reality, Mixed Reality, Physical vs. Digital Twins
- Applications and case studies

Artificial Intelligence Techniques for Network and Service Management
- Management with AI
- Artificial Neural Networks
- Machine Learning & Deep Learning
- Big Data & Data Mining
- Mobile Agents
- AI vs. legacy optimization methods in management

Management of Softwarised Networks, Software-Defined Networking, Network Function Virtualization, Service Function Chaining
- Network virtualization
- Control plane programmability
- Cloud Network (data, control, management planes) programmability
- Methods and frameworks enabling customized functions on data packets and processes to program the header of the packets
- Cloud Network Slicing in 5G & 6G
- Management & Orchestration (MANO)
- Service Function Chaining
- Protocols, languages, and frameworks
- Open-source networking
- Cloud-native networking
- Case studies and practical deployments

Management Functions and Practical Approaches
- FCAPS: Fault, Configuration, Accounting, Performance and Security Management
- Cybersystems, Security and Reliability in Network Softwarization and Management

- Green operation & management
- Billing & Accounting
- Service Assurance
- Service Fulfillment
- Service Level Management

Network Management & Operational Experience
- Ad-hoc networks
- Automotive and Vehicular networks
- Broadband access networks
- Cognitive Radio networks
- e-Maintenance
- Future Internet
- Heterogeneous networks
- Home networks
- M2M networks
- OSS/BSS development
- Overlay networks
- Personal area networks
- Sensor networks
- Wireless and mobile networks

Service Management
- Business management
- Clouds
- Data center management
- Data service management
- Hosting
- Infrastructure as a Service, Management as a Service, Platform as a Service, Software as a Service
- IT service management
- Managed service provisioning
- Multimedia service management
- OTT service management
- Virtualized infrastructure management
- Security Management
- Intrusion detection, intrusion prevention, intrusion response
- Network security
- Security for peer-to-peer and overlay networks
- Security for smart X and large systems and critical infrastructures
- Privacy and anonymity
- Vulnerability management
- Early warning

Modelling, Measurement and Performance Analysis
- Performance measurements and evaluation, monitoring, data analytics, validation and debugging for network management and softwarized networks, digital twinning
- Network and service qualities, performance, reliability, scalability, elasticity, resilience, sustainability, maintainability, safety, and security with guarantees
- Protocols and methods for delivery of high precision services with Key Performance Indicators (KPIs) guarantee
- Profiling and performance evaluation of softwarized network functions/components
- Debugging of softwarized networks
- High precision networking, precision telemetry, management of cyber-networking systems supporting physical/digital twins

Methodologies for Network Operations and Management
- Management and operation of high-precision networks and services
- Control theory
- Markov Chains and management
- Data collection and aggregation
- Digital twining
- Design and simulation
- Economic/finance theories
- Experimental approaches
- Optimization theory
- Probability and stochastic processes, queuing theory
- Risk management
- Software engineering methodologies Visualization
- Management approaches for Quantum Networking

Management Approaches, Resources and Functions
- Management architectures, Softwarized network architectures/Infrastructures
- Networking, Edge cloud-native networking,Time-Sensitive Networking and IP convergence, Deterministic Networking, IoT-Edge-Cloud Network Continuum
- End-to-end and multi-domain softwarized networks, multi-domain management, green operations and management, management of energy-efficient networks and datacenters
- Network and cloud network operating systems facilities, resource abstraction, connectors and adaptation, capability and operation exposure, network functions, cloud-native functions
- Dynamic migration of network functions, interfaces, deployment and integration with software-based control, management, and orchestration
- Resource allocation mechanisms for deterministic data transmission and networking
- Microservices, serverless computing, secured containers infrastructure and new software paradigms for managing and operating network functions
- Standard frameworks and systems
- Integrated management
- Autonomic and self-management
- Blockchain Networking
- Zero-Configuration Networking, Closed-loop operations, Self-Driving Networking, Intent-based Management, Smart Networks, Zero-Trust Networking
- Best practices and management standards
- Centralized management
- Distributed management
- Organizational aspects
- Policy-based management
- Process-oriented management
- IT service management (ITSM)
- Process engineering and frameworks (ITIL, CobIT, RiskIT, ValIT)

Management Efforts for Pandemics and Crisis Situations (COVID-19)
- Contact and Activity Tracing
- Network/Service Management Support
- Network Measurements
- Network Adaptation

Case Studies, Testbeds and Practical Experiences

IMPORTANT DATES
Paper Submission Deadline: 20 September 2021
Notification of Acceptance: 17 December 2021
Camera-Ready Submission: 14 January 2022

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Guidelines for our Authors

Format of the manuscripts

Original manuscripts and final versions of papers should be submitted in IEEE format according to the formatting instructions available on

https://journals.ieeeauthorcenter.ieee.org/
Then click: "IEEE Author Tools for Journals"
- "Article Templates"
- "Templates for Transactions".

Length of the manuscripts

The length of papers in the aforementioned format should be 6-8 journal pages.
Wherever appropriate, include 1-2 figures or tables per journal page.

Paper structure

Papers should follow the standard structure, consisting of *Introduction* (the part of paper numbered by "1"), and *Conclusion* (the last numbered part) and several *Sections* in between.
The Introduction should introduce the topic, tell why the subject of the paper is important, summarize the state of the art with references to existing works and underline the main innovative results of the paper. The Introduction should conclude with outlining the structure of the paper.

Accompanying parts

Papers should be accompanied by an *Abstract* and a few *Index Terms (Keywords)*. For the final version of accepted papers, please send the short cvs and *photos* of the authors as well.

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In the title of the paper, authors are listed in the order given in the submitted manuscript. Their full affiliations and e-mail addresses will be given in a footnote on the first page as shown in the template. No degrees or other titles of the authors are given. Memberships of IEEE, HTE and other professional societies will be indicated so please supply this information. When submitting the manuscript, one of the authors should be indicated as corresponding author providing his/her postal address, fax number and telephone number for eventual correspondence and communication with the Editorial Board.

References

References should be listed at the end of the paper in the IEEE format, see below:
 a) Last name of author or authors and first name or initials, or name of organization
 b) Title of article in quotation marks
 c) Title of periodical in full and set in italics
 d) Volume, number, and, if available, part
 e) First and last pages of article
 f) Date of issue
 g) Document Object Identifier (DOI)

[11] Boggs, S.A. and Fujimoto, N., "Techniques and instrumentation for measurement of transients in gas-insulated switchgear," IEEE Transactions on Electrical Installation, vol. ET-19, no. 2, pp.87–92, April 1984. DOI: 10.1109/TEI.1984.298778

Format of a book reference:

[26] Peck, R.B., Hanson, W.E., and Thornburn, T.H., Foundation Engineering, 2nd ed. New York: McGraw-Hill, 1972, pp.230–292.

All references should be referred by the corresponding numbers in the text.

Figures

Figures should be black-and-white, clear, and drawn by the authors. Do not use figures or pictures downloaded from the Internet. Figures and pictures should be submitted also as separate files. Captions are obligatory. Within the text, references should be made by figure numbers, e.g. "see Fig. 2."
When using figures from other printed materials, exact references and note on copyright should be included. Obtaining the copyright is the responsibility of authors.

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Authors are requested to submit their papers electronically via the following portal address:

https://www.ojs.hte.hu/infocommunications_journal/about/submissions

If you have any question about the journal or the submission process, please do not hesitate to contact us via e-mail:

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IEEE International Conference on Communications

16-20 May 2022 // Seoul, Korea
Intelligent Connectivity for Smart World

IEEE ICC®

CALL FOR PAPERS AND PROPOSALS

The 2022 **IEEE International Conference on Communications** (ICC) will be held in the world famous Gangnam district which is the most vibrant part of the city of Seoul, Korea, from 16 to 20 May 2022. Themed "Intelligent Connectivity for Smart World," this flagship conference of the IEEE Communications Society will feature a comprehensive high-quality technical program including 13 symposia and a variety of tutorials and workshops. IEEE ICC 2022 will also include an attractive industry program aimed at practitioners, with keynotes and panels from prominent research, industry and government leaders, business and industry panels, and technological exhibits.

IMPORTANT DATES

Paper Submission
11 October 2021

Acceptance Notification
18 January 2022

Camera-Ready
15 February 2022

Tutorial Proposals
4 October 2021

Workshop Proposals
2 August 2021

Industry Forum Proposals
13 December 2021

TECHNICAL SYMPOSIA

- IoT & Sensor Networks
- Cognitive Radio & AI-Enabled Networks
- Communication & Information System Security
- Communication QoS, Reliability, & Modeling
- Communication Software & Multimedia
- Communication Theory
- Green Communication Systems & Networks
- Mobile & Wireless Networks
- Next-Generation Networking & Internet
- Optical Networks & Systems
- Signal Processing for Communications
- Wireless Communications

- Selected Areas in Communications
  - *Big Data*
  - *Cloud Computing, Networking and Storage*
  - *e-Health*
  - *Molecular, Biological and Multi-Scale Communications*
  - *Satellite & Space Communications*
  - *Smart Grid Communications*
  - *Social Networks*
  - *Machine Learning for Communications*
  - *Backhaul/Fronthaul Networking and Communications*
  - *Aerial Communications*
  - *Quantum Communications & Computing*
  - *Full-Duplex Communications*

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INDUSTRY FORUMS AND EXHIBITION PROGRAM
Proposals are sought for forums, panels, presentations and demos, specifically related to issues facing the broader communications and networking industries.

TUTORIALS
Proposals are invited for half- or full-day tutorials in all communication and networking topics.

WORKSHOPS
Proposals are invited for half- or full-day workshops in all communication and networking topics.

icc2022.ieee-icc.org

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SCIENTIFIC ASSOCIATION FOR INFOCOMMUNICATIONS

Who we are

Founded in 1949, the Scientific Association for Info-communications (formerly known as Scientific Society for Telecommunications) is a voluntary and autonomous professional society of engineers and economists, researchers and businessmen, managers and educational, regulatory and other professionals working in the fields of telecommunications, broadcasting, electronics, information and media technologies in Hungary.

Besides its 1000 individual members, the Scientific Association for Infocommunications (in Hungarian: HÍRKÖZLÉSI ÉS INFORMATIKAI TUDOMÁNYOS EGYESÜLET, HTE) has more than 60 corporate members as well. Among them there are large companies and small-and-medium enterprises with industrial, trade, service-providing, research and development activities, as well as educational institutions and research centers.

HTE is a Sister Society of the Institute of Electrical and Electronics Engineers, Inc. (IEEE) and the IEEE Communications Society.

What we do

HTE has a broad range of activities that aim to promote the convergence of information and communication technologies and the deployment of synergic applications and services, to broaden the knowledge and skills of our members, to facilitate the exchange of ideas and experiences, as well as to integrate and harmonize the professional opinions and standpoints derived from various group interests and market dynamics.

To achieve these goals, we…

- contribute to the analysis of technical, economic, and social questions related to our field of competence, and forward the synthesized opinion of our experts to scientific, legislative, industrial and educational organizations and institutions;
- follow the national and international trends and results related to our field of competence, foster the professional and business relations between foreign and Hungarian companies and institutes;
- organize an extensive range of lectures, seminars, debates, conferences, exhibitions, company presentations, and club events in order to transfer and deploy scientific, technical and economic knowledge and skills;
- promote professional secondary and higher education and take active part in the development of professional education, teaching and training;
- establish and maintain relations with other domestic and foreign fellow associations, IEEE sister societies;
- award prizes for outstanding scientific, educational, managerial, commercial and/or societal activities and achievements in the fields of infocommunication.

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