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Symposium co-organizer:

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THE 15th SYMPOSIUM ON GREEN NETWORKING AND COMPUTING (SGNC 2024)

September 26 - 28, 2024, Split-Bol (island of Brač), Croatia

Call for Papers

The 15th Symposium on "Green Networking and Computing" (SGNC 2024) will be held in the frame of the 32nd International Conference on Software, Telecommunications, and Computer Networks (*SoftCOM2024*). The Symposium has been organized since 2010 in the frame of the *SoftCOM* conference and it will take place on September 26-28, 2024 in Spit-Bol (island of Brač), Croatia. The symposium co-organizers are members of Marie Skłodowska Curie's Innovative Training Network (ITN) Greenedge project. In the frame of the Symposium, the 15th "Special Session on green networking and computing" technical workshop, keynote speech, poster sessions and student contest sessions will be organized. The members of the Croatian ACM chapter participate as attendees of the symposium and the SGNC 2024 symposium is organized in cooperation with the IEEE Technical Committee on Green Communications and Computing (TCGCC) and the Croatian Communications and Information Society (CCIS).

The topic of "green networking and computing" is attracting growing attention for economic, energetic, and environmental reasons. The rapidly increasing amount of power consumed by Information and Communication Technologies (ICT), as well as the energy bills of service providers, contributes to economic reasons. According to several energetic studies, ICT alone is responsible for between 2 and 10% of the power consumption worldwide, and communication networks significantly contribute to energy consumption of ICT. In addition, the carbon footprint of ICT devices due to energy consumption and the activities related to their entire lifecycle management contribute to global warming. In recent years, energy-saving techniques have been considered for communication networks with new generations of devices and network management approaches exploiting algorithms and protocols for adapting the network to the varying traffic load. In particular, the design and implementation of artificial intelligence (AI) - based algorithms for network resource management that can contribute to the improvement of access, edge and core network energy efficiency have recently attracted significant research interest from the academia and industry. The Symposium on "Green Networking and Computing" serves as a platform for researchers and visionaries from academia, research labs, and industry from all over the world to share ideas, views, results, and experiences in the field of green wired and wireless networking. The scope of the symposium is very broad, accepting contributions from theoretical and experimental achievements to innovative design and management approaches, prototyping efforts, and case studies. The topics of interest include, but are not limited to:

- Implementation of AI for improving the energy efficiency of communication networks and systems
- Power consumption models of networking and AI infrastructures
- Power measurements and data from empirical studies of communication and edge computing networks
- Techniques for reducing power consumption in data centers
- Hardware and architectural support for reducing power consumption
- Energy efficient network management and Internet of Things (IoT)
- Green network design and energy-efficient smart grids
- Applications of green networking technologies and principles
- Cross-layer optimizations toward reducing energy consumption
- Optimization of energy consumption in optical networks
- Energy-efficient protocols and transmission techniques
- Energy-efficient edge computing
- Energy-efficient peer-to-peer networking and overlays
- Energy-efficient edge/cloud computing and network function virtualization
- Green wireless access networks
- Green wired access networks
- Green future Internet and software-defined networking
- Energy cost models for (edge) network operators
- Energy-efficient sensors and sensor networks
- Renewable energy sources for power supply of edge-based, wired and wireless access networks
- Antenna design and transmission technologies for reducing energy consumption
- Green communication and computing technologies for smart cities
- Energy-efficient vehicle and industrial communications
- Energy-efficient critical communications
- Green mobile applications
- Green cognitive radio networks

Web link for paper submission in EDAS system (Symposium on Green Networking and Computing): https://edas.info/newPaper.php?c=32389&track=124710

Accepted and presented papers will be published in the conference proceedings, IEEE Xplore, Scopus, as well as other Abstracting and Indexing (A&I) databases and submitted to possible inclusion in the Web of Science (WoS) database.

IMPORTANT DATES

Complete manuscript due: May 27, 2024
Notification of acceptance: June 28, 2024
Camera-ready manuscript: July 12, 2024

sensors

The authors of selected papers presented at the SGNC 2024 symposium are invited to submit the extended versions of their papers to the Special Issue on "Energy-efficient communication networks and systems: 2nd edition" of Sensors journal: ***https://www.mdpi.com/journal/sensors/special_issues/T01878J9S0***

Submitted papers should be extended to have the length of regular research or review articles, and overall results should be extended by at least 70% (e.g. in the form of technical extensions, more in-depth evaluations, or additional use cases).

More information about the Conference including details on the submission process and authors kit is available on the website: ***https://2024.softcom.fesb.unist.hr***

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