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IEEE Communications Society

IEEE ICC™ 2018
IEEE International Conference on Communications
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COMMUNICATIONS FOR CONNECTING HUMANITY

BACK IN THE US AFTER 15 YEARS!

CALL FOR PAPERS

GREEN COMMUNICATION SYSTEMS AND NETWORKS SYMPOSIUM

Symposium Co-Chairs

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Scope and Topics of Interest

Over the years, the use of Information and Communication Technology (ICT) has come to dominate several areas, improving our lives, offering us convenience and reshaping our daily work circumstances in the process. Despite the passion about advances in the ICT infrastructure industry, enterprises and governments face the renewed challenges of tackling sustainability issues and adopting environmentally sound practices. Computers and other ICT infrastructure consume significant amounts of electricity, placing a heavy burden on electric grids and contributing to greenhouse gas emissions. Moreover, the large number of devices with high transmission capacity connected to the Internet is playing a major role in increasing the energy consumption by communications networks.

The Green Communication Systems and Networks Symposium in IEEE ICC 2018 aims to consolidate and disseminate the latest developments and advances in the emerging research areas relevant to green communications and computing. This symposium invites participations from both academic and industry researchers working in the areas of green-enabled communications and computing networks, as well communication and computing technologies enabling other green solutions such as smart grids, green cloud computing data centers, green buildings and green logistics, and smart cities. Authors are invited to submit papers presenting novel technical research studies as well as broader position papers.

Topics of Interest Include (but are not limited to):

- Theory, modeling, analysis, and/or optimization for green and sustainable green communications, computing networks, and systems
- Life-cycle analysis
- Green architecture, strategies, metrics, algorithms, protocols, scheduling, and/or designs
- Non-energy green topics, issues and approaches
- Green software, hardware, devices, and equipment
- Green communications and networking
- Cross-layer design and optimization for green communications and computing
- Green wireline and/or optical communications and networking
- Green wireless communications and networks
- Green storage, cloud computing, and data centers
- Novel network concepts and architectures lowering the overall footprint of ICT
- Green traffic shaping and policy implementation
- Use of cognitive principles to achieve green objectives
- Power-efficient cooling and air-conditioning systems for communications and computing

- Physical layer approaches for green communications and computing
- Low cost, energy-efficient antenna and RF designs
- Green management
- Big data meet green challenges
- Energy efficiency and scalability of communication networks and infrastructures
- Context-based green approaches & green awareness
- Economy and pricing for green systems and services
- Green monitoring
- Measurement and profiling of green issues
- Green scheduling for communications and computing
- Power consumption trends and reduction in communications and computing
- Modeling and analysis for green communications and computing
- Security in green communication and computing
- Security and energy efficiency
- Carbon-neutral communication and computing systems
- Energy efficiency in 5G
- Zero-emission base stations and communication devices
- Zero-emission networking
- Smart cities
- Intelligent transportation systems
- Standardization, policy and regulation for green communications and computing
- Mitigation of electromagnetic pollution
- Experimental test-beds and results for green communications and computing
- Transport and logistics efficiency, e.g., applications to road traffic optimization and supply chain management
- Green industrial processes
- ICT for green buildings
- Energy harvesting, storage, recycling, wireless power transfer
- Renewable energies for ICT
- Integration of renewable energy in communication systems and networks
- Energy-aware communications and networking
- Architectures, models, security, and approaches for smart grids and smart grid networks
- Advanced metering infrastructure and smart meter technologies
- Field trials and deployment experiences

Submission Guidelines

The IEEE ICC 2018 website provides full instructions on how to submit papers & the paper format.

You will select the desired symposium when submitting.

The paper submission deadline is October 15, 2017.

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