

# The 18<sup>th</sup> IEEE International Conference on Green Computing and Communications (GreenCom-2022)

Aug 22 - 25, 2022, Espoo, Finland

## IMPORTANT DATES

**Paper Submission Deadline:** May 07, 2022  
**Author Notification:** June 10, 2022  
**Camera-ready Due:** June 25, 2022  
**Conference Dates:** August 22-25, 2022

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## Green Computing and Communications

Computer networks, communication systems, and other IT infrastructures have a growing environmental footprint due to the significant amounts of energy consumption and greenhouse gas emission. To address such problems and create a sustainable environment, new energy models, algorithms, methodologies, platforms, tools and systems are required to support next-generation computing, caching and communication infrastructures. Thus, green computing, caching and communications solutions should be designed to better integrate renewable energy sources, to improve energy efficiency, and to reduce greenhouse gas emissions and harmful materials.

The 2022 IEEE International Conference on Green Computing and Communications (GreenCom-2022) will be an exciting international forum for scientists, engineers, and researchers to exchange their novel research regarding advancements in the state-of-art of green computing and communications, as well as to identify the emerging research topics and open issues for further researches.

## IEEE GreenCom -2022 Tracks and Topics

### Track 1: Green Computing, Caching and Communication Technologies

- ✧ Green infrastructure sustainable design and technologies
- ✧ Energy- and power-constrained devices and gateways
- ✧ Ultra-low power systems architectures
- ✧ Low-power, distributed data processing on sensors
- ✧ Energy-efficient M2M wired and wireless communications and networking
- ✧ Optimization and/or analysis in green computing, caching and communications (including core network optimization)
- ✧ Cross-layer design and optimization for green computing, caching and communications
- ✧ Green big data, cloud, edge computing, and data center architecture
- ✧ Green technologies for 5G (SDN, IoT, and crowdsourcing, etc.)
- ✧ Energy harvesting communications and networks

### Track 2: Smart Energy and Smart Grid

- ✧ Architectures, models, and security for smart grids and smart grid networks relevant to energy efficiency
- ✧ Large-scale monitoring, control and demand response
- ✧ Advanced data fusion, mining and modeling in

### smart grid

- ✧ Management and control of distributed energy generation, storage and consumption
- ✧ Advanced smart grid applications: grid-to-vehicle and vehicle-to-grid, micro-grid

### Track 3: AI and Green Society Applications

- ✧ AI-enabled smart sensing systems
- ✧ AI-enabled smart city
- ✧ AI-enabled green vehicle, green home, green buildings and green anything
- ✧ AI-enabled green industrial automation and control
- ✧ Intelligent transport systems and control
- ✧ AI for energy efficiency in aerial/UAV communication networks
- ✧ Machine learning for green social networks
- ✧ Applications of blockchain in energy management and trading
- ✧ Transport and logistics efficiency, e.g., applications to road traffic optimization and supply chain management
- ✧ Economics and pricing for green systems, services and applications
- ✧ Artificial intelligence and machine learning for green wireless communication systems
- ✧ Wireless power transfer and energy harvesting for wireless communications
- ✧ Energy efficiency for Wearables, Body Sensor Networks, and Smart Portable Devices

## Paper Submission Guidelines

All papers need to be submitted electronically through the EDAS website <https://edas.info/N29461> with PDF format. Submitted papers must not substantially overlap with papers that have been published or that are simultaneously submitted to a journal or a conference with proceedings. A submission is limited to 8 pages for main conference regular papers, or 6 pages (short paper), and 2-4 pages for poster papers in the IEEE Computer Society Proceedings Format. Paper not following the IEEE templates will be rejected without reviews. Paper submission templates can be found at <https://www.ieee.org/conferences/publishing/templates.html>.

A submission can have at most 2 additional pages with the pages overlength charge if accepted. Papers must be clearly presented in English, including tables, figures, references and appendices. Papers will be selected based on their originality, significance, relevance, and clarity of presentation assessed by at least three reviewers.

Submission of a paper should be regarded as a commitment that, should the paper be accepted, at least one of the authors will register and present the work, with either online or offline presentation. IEEE GreenCom 2022 reserves the right to exclude a paper from distribution after the conference (e.g., removal from the digital library and indexing services), if the paper is not presented at the conference.

Accepted and presented papers will be published by IEEE (IEEE-DL and EI indexed). Distinguished papers presented at the conference, after further revision, will be recommended to special issues of high quality international journals. Two or three outstanding papers will be selected to receive the **Best Paper Awards** and recommended to Journal of Computer Science & Technology (CCF T1). More details at the conference website: <http://iee-cybermatics.org/2022/greencom/>.

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