

CALL FOR PAPERS
SPECIAL SESSION ON
“Intelligent and Energy-efficient Applications in Edge Computing”
IEEE ICNSC 2021
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Session description:

Recent years have witnessed dramatic proliferation of edge computing and Internet of Things (IoT), where billions of edge devices are connected to Internet, yielding zillions bytes of data at the edge of network. Nevertheless, it is challenging to transmit and process zillions bytes of data with current cloud-device architectures because of bandwidth limits of networks, long latency of cloud services, and privacy issues. To address them, edge computing is emerging and has received a tremendous amount of attentions. By moving data storage, computing, and management closer to the edge of network, edge computing is widely chosen as a promising alternative to meet needs of high-scalability, low-latency, and energy-efficiency, as well as to alleviate burdens of network traffic. Yet, various IoT applications (e.g., connected vehicles, smart city, and manufacturing automation) emerge, and therefore, it becomes highly challenging for edge computing to deal with issues caused by heterogeneous IoT environments. In addition, due to the scale increase of IoTs, energy consumption and its efficiency of edge computing become increasingly challenging, and have become a big obstacle to emerging development and applications of future edge computing-related systems. Therefore, the proposed special session aims to bring together researchers and practitioners from academia and industries interested in addressing theoretical as well as application issues of cloud/edge computing, and sharing their research views, ideas, new findings, and state-of-the-art results. Interested topics include (but not limited to):

- Dynamic resource provisioning
- IoT-based system monitoring and control
- Energy-efficient cyber-physical systems
- Artificial intelligence (AI) and machine learning for cloud operations management
- Resource, configuration, energy, and data management
- Cloud federation and cloud/edge management
- Predictive and proactive service management
- AI for energy efficiency of cloud operations
- Edge computing architectures, systems, and applications
- Seamless terminal-edge-cloud computing
- Edge computing for 5G/6G
- Hybrid-clouds and multi-clouds integration

- Deep learning and big data analysis in cloud/edge computing
- Data-driven modeling, scheduling and optimization in cloud/edge computing
- Industrial applications and case studies in cloud/edge computing

Keywords

Edge computing, distributed systems, Internet of Things, machine Learning, IoT applications

SUBMISSION

Papers must be submitted electronically for peer review through PaperCept by **August 1, 2021**:

<https://easychair.org/conferences/?conf=icnsc2021>. In PaperCept, click on the **ICNSC 2021** link “**Submit a contribution to ICNSC 2021**” and follow the steps.

All papers must be written in English and should describe original work. For guidelines, please follow the ICNSC website link <http://icnsc2021.com/Calls-for-papers.html>

DEADLINES

August 1, 2021: deadline for paper submission

September 15, 2021: notification of paper acceptance/rejection

October 15, 2021: deadline for final camera-ready papers.