

GPC2024: The 19th International Conference on Green, Pervasive, and Cloud Computing

University of Macau

Macao, China, September 27-30, 2024

Conference website <http://2024.gpc-conf.org/>

Submission link <https://cmt3.research.microsoft.com/gpc2024>

Submission deadline April 30, 2024

Notification of acceptance: June 7, 2024

Topics: pervasive and green computing wireless and ubiquitous networking mobile sensing and computing edge intelligence

Introduction

Green computing, in the context of cloud and pervasive computing, is an emerging research field in computer science and engineering. Pervasive and cloud computing are promising paradigms that have been seeing exponential growth in the deployments and poised to take major roles in human's daily life. But in order to realize this potential, both are facing the critical challenges related to energy consumption, for example, controlling the energy spent by the large-scale data centers and

prolonging the battery life of mobile devices in pervasive computing and Internet of Things (IoT). New concepts and technologies such as Mobile Cloud Computing (MCC), Software-Defined Networking (SDN), Edge / Fog and Hybrid Cloud Services can be explored to make data centers and wireless devices more energy efficient.

The 19th International Conference on Green, Pervasive, and Cloud Computing (GPC 2024) focuses on pervasive and environmentally sustainable computing. GPC 2024 will be held in Macao, China, September 27-30 2024, hosted by University of Macau, Huazhong University of Science and Technology, Harbin Institute of Technology, Harbin Engineering University and National Academy of Guo Ding Institute of Data Sciences. GPC 2024 will provide a forum for researchers and practitioners to discuss and exchange novel ideas, results, experiences and work-in-process on the Green, Pervasive, and Cloud Computing.

List of Topics

Pervasive and Green Computing

- Ubiquitous computing and mobile human-computer interaction
- Intelligent digital health care, education, media games, etc.
- Smart factory and intelligent industry

- Smart building and smart home
- Smart grid applications
- Social network and services
- Green urban computing

Wireless and Ubiquitous Networking

- Energy efficient communication
- Millimeter-wave and terahertz communication
- Slicing
- Ubiquitous communications and networks
- Internet architecture
- Vehicular Networks
- Robotic and drone-based networking

Mobile Sensing and Computing

- Applications of machine learning to mobile / wireless research
- Implanted and wearable sensing and computing
- Mobile data science and analysis
- Mobile human-computer interaction
- Mobile systems for smart spaces
- Mobile health, web, video, virtual reality, and other applications
- Embedded and energy-harvesting systems

Edge Intelligence

- Cloud, edge / fog, cluster, and grid computing systems
- Robotic and drone-based networking
- Low-latency and energy-aware processing
- Artificial intelligent in distributed computing systems
- Model compression
- Fault tolerance, reliability and survivability in edge computing
- Information security and privacy in edge computing

Cyber-Physical-Social Systems

- Socially-aware computing
- Green cyber-physical systems
- Human-machine intelligence
- Human-in-the-loop computing
- Human-centered computing
- Security and privacy issues
- Context-aware systems

Industrial Digitization and Applications

- Internet of things
- Big data and digital twin
- Infrastructure softwarization

- Self-organization and organic computing
- Economy and business models for industry applications
- Service level agreements (SLAs) guarantee
- Hardware and software reliability, verification and testing
- Incentives and innovative pricing for the management of cloud resources
- Artificial intelligence techniques in network and system security and privacy

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Submission Guidelines

Submission will be electronic in PDF format through the Easy Chair system at <https://cmt3.research.microsoft.com/gpc2024>. The submitted materials should not be submitted or published elsewhere. Each paper is limited to 16 pages including figures and references using Springer LNCS template

([LaTeX2e Proceedings Templates download.zip](#), [Microsoft Word Proceedings Templates.zip](#)). Papers will be selected based on their originality, timeliness, significance, relevance, and clarity of presentation. 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 attend the conference to present the work.

Manuscript templates for the Conference Proceedings can be found at: <https://www.springer.com/gp/computer-science/lncs>

Important Dates

- **Paper Submission Deadline: Apr. 30, 2024**
- **Acceptance: Jun. 7, 2024**

Contact

For any question please do not hesitate to contact gpc2024@hust.edu.cn