



## PRELIMINARY CALL FOR PAPERS

The International Conference on **Parallel and Distributed Computing, Applications and Technologies** (PDCAT) is a major forum for scientists, engineers, and practitioners throughout the world to present the latest research, results, ideas, developments and applications in all areas of parallel and distributed computing. Started in Hong Kong in 2000, PDCAT 2026 will be held in Changsha, China, after 26 years of success in many cities of countries, including Japan, China, Singapore, Australia, New Zealand, and Korea across Asia-Oceania. We are inviting new and unpublished papers on, but not limited to, the following topics:

### Networking and Architectures:

- Interconnection networks
- Parallel/distributed architectures
- Heterogeneous and multimedia Systems
- Reliability, and fault-tolerance
- Ubiquitous computing systems
- Computer networks, Optical networks
- Communication and telecommunication
- Wireless networks and mobile computing
- Internet of Things (IoT)
- Cloud/Grid computing systems
- Reconfigurable architecture

### Software Systems and Technologies:

- Task mapping and job scheduling
- Formal methods and programming languages
- Internet computing and applications
- Quantum computing and algorithms
- Image processing and computer vision
- Agent-based technologies
- Operating systems and system software
- Software tools and development environments
- Parallelizing compilers and optimization
- Web services and distributed applications
- Component-based software technologies
- Simulation, modeling, and visualization

### Algorithms and Applications:

- Artificial Intelligence algorithms
- Database systems and data mining
- Intelligent computing and neural networks
- Parallel and distributed algorithms
- Big data computing and analytics
- Distributed data and knowledge-based systems
- Image processing and computer graphics
- High-performance scientific computing
- Reconfigurable high-performance computing systems
- Resource allocation and management
- Network routing and communication algorithms
- Bioinformatics and computational biology

### Security and Privacy:

- Distributed federated learning paradigms
- Quantum-enabled federated learning frameworks
- Privacy-preserving mechanisms for artificial intelligence
- Security of artificial intelligence systems
- Privacy-preserving crowd intelligence
- Attack and defense algorithms in federated learning
- Attack and defense strategies for edge computing
- Quantum-based defense mechanisms in federated learning paradigms
- Privacy-preserving computation techniques
- Database security and cloud security
- Access control, authorization, and biometric security

## PAPER SUBMISSION GUIDELINE:

Papers reporting original and unpublished research results and experience are solicited. Papers will be selected based on their originality, timeliness, significance, relevance, and clarity of presentation. Papers should be formatted according to the Springer LNCS format. Extended versions of selected papers will be invited to special issues of SCI-indexed international journals.

### ORGANIZING COMMITTEE:

General Chair: Kenli Li, Hunan University, China  
Chan Tong Lam, Macao Polytechnic U, China  
Program Chairs: Zhuo Tang, Hunan University, China  
Hui Tian, Griffith University, Australia

### IMPORTANT DATES:

Paper submission deadline: 1 Aug. 2026  
Author notification: 15 Sep. 2026  
Camera-ready version due: 30 Sep. 2026  
Conference: 28-30 Nov. 2026

**CONFERENCE WEBSITE:** [www.pd-cat.org](http://www.pd-cat.org)

**SPONSORS:** Hunan University, Springer

**CONTACT US:** For any inquiries regarding PDCAT 2026, please contact Huizhang Luo at [luohuizhang@hnu.edu.cn](mailto:luohuizhang@hnu.edu.cn).