# The 31<sup>st</sup> International Conference on Parallel and Distributed Systems



Hefei, China December 14 - 18, 2025
Ubiquitous Computing for Global Communities

# **Call for Papers**

# **System and Applied Data Science**

#### **Track Co-Chairs**

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#### **Scope and Motivation**

The System and Applied Data Science track aims to bring together cutting-edge research at the intersection of systems engineering and data-driven methodologies to address the demands of today's complex, data-intensive environments. We welcome work that not only advances core system architectures, spanning from edge and embedded platforms to large - scale distributed frameworks, but also demonstrates novel applied data science techniques in real-world contexts. By fostering dialogue between systems designers, data scientists, and application developers, this track seeks to showcase innovations in scalable data processing, adaptive machine learning deployment, and robust inference over cyber-physical, mobile, and social infrastructures. Our motivation is to bridge the gap between theoretical advances in data science and the practical requirements of next-generation systems, empowering intelligent decision-making and autonomous behavior across diverse domains.

## **Topics of Interest**

Our track seeks original contributions in the following topical areas, plus others that are not explicitly listed but are closely related:

- Smart city applications and urban informatics
- Intelligent cyber-physical systems and real-time control
- Cyber-physical social systems and human-in-the-loop analytics
- Internet of Things (IoT): sensing, communication, and management
- Mobile, embedded, and edge computing architectures
- Scalable data processing and distributed analytics frameworks
- > Federated and distributed learning for resource-constrained platforms
- > Data-driven security, privacy, and trust in interconnected systems
- Autonomous systems: robotics, drones, and self-driving vehicles
- Energy-efficient and green system design for data-intensive workloads
- Digital twins, simulation, and model-based system engineering
- Augmented decision support in industrial and critical infrastructures

### **Important Dates**

Paper Submission: 2025-08-15

**Notification: 2025-10-01** 

Camera Ready and Registration: 2025-10-15

## **How to Submit a Paper**

Each submission should include the authors' names, affiliations, an abstract, and 5–10 keywords. Papers are limited to 8 pages, including figures and references. Up to two additional pages may be included with an overlength charge. Full instructions on how to submit papers are provided on the IEEE ICPADS 2025 website: http://ieee-icpads.org.cn/CFP-research-paper.html