

MP 2022 The 13<sup>th</sup> International Symposium on Parallel Architectures, Algorithms and Programming

November 4-6, 2022 Beijing · China

# **CALL FOR PAPERS**

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### **IMPORTANT DATES:**

### all deadlines are 23:59 Pacific Standard Time (PST)

<ul> <li>Submission Deadline</li> </ul>	July 30, 2022
<ul> <li>Notification Acceptance</li> </ul>	September 30, 2022
Camera-ready Paper Due	October 10, 2022
Registration Deadline	October 15, 2022
Conference Dates	November 4-6, 2022

### TOPICS

Following the successful PAAP'08 in Hefei, PAAP'09 in Nanning, PAAP'10 in Dalian, PAAP'11 in Tianjin, PAAP'12 in Taipei, PAAP'14 in Beijing, PAAP'15 in Nanjing, PAAP'17 in Haikou, PAAP'18 in Taipei, PAAP'19 in Guangzhou, PAAP'20 in Shenzhen, PAAP'21 in Xi'an, PAAP'22 will be held in Beijing, China, November 4-6, 2022. We are inviting new and unpublished papers on, but not limited to, the following topics:

#### Architectures

- · Multi/many-core architectures
- Interconnection networks
- Cluster, grid and cloud computing systems
- Network-on-chip architectures
- · Survivable and safety-critical systems
- Ubiquitous computing systems
- Sensor, wireless and RFID systems
- Reconfigurable architectures
- · Architectural support for programming language or software development

#### **Parallel Programming**

- Multi/many-core programming
- Parallel programming theory and models
- · Formal methods and verification
- · Middleware for parallel systems
- · Parallel programming languages · Parallel compilers and runtime systems
- · Performance analysis, debugging and
- optimization
- · Parallel libraries and application frameworks

### **Privacy and Security**

- · Cloud security
- · Data privacy protection
- Cryptography
- Intrusion detection Copyright protection
- Access control
- Data provenance
- Trusted computing

#### Algorithms

- · Combinatorial and graph algorithms
- Numeric algorithms
- · Task mapping and job scheduling
- · Parallel/distributed databases and knowledge discovery
- High-performance scientific computing
- Resource allocation and management
- · Power-aware Computing
- Secure distributed computing
- · Network routing and traffic control

### **High Performance Systems**

- Operating systems for parallel/distributed systems
- High-performance computer arithmetic
  - · Memory hierarchy and caching
  - · Performance tuning, optimization and profiling Human-computer interaction in parallel/distributed
- systems
  - Photonic and quantum computing
  - Media computing in parallel/distributed systems
  - Software engineering for parallel/distributed system

### Big Data Processing and Deep Learning

- Mass data stream processing in clouds
- · Big data models and computation theory
- Big data mining and fusion
- Dimension reduction for large data sets · Big data placement, scheduling and optimization
- Multi-source data processing and integration
- · Deep learning models
- · Deep learning applications

## PAPER SUBMISSION GUIDELINE

Papers will be selected based on their originality, timeliness, significance, relevance, and clarity of presentation. Accepted papers will be published in the conference proceedings. Submissions should include abstract, key words, the e-mail address of the corresponding author, and must not exceed 6 pages of double column, including tables, figures and reference. Submissions imply the willingness of at least one author to register, attend the conference, and present the paper. Papers must be submitted electronically in PDF through EasyChair: https://www.easychair.org/cfp/paap\_22

Submissions should follow the template of IEEE conference proceedings available at https://www.ieee.org/conferences/publishing/templates.html.The conference proceedings will be published by IEEE Computer Society. Extended versions of selected papers will be invited for submission to special issues of international journals.

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