



PRELIMINARY  
CALL FOR PAPERS

**PDCCS-2008**

**21<sup>st</sup> International Conference on  
Parallel and Distributed Computing and Communication Systems**

**September 24-26, 2008**

**Holiday Inn Downtown-Superdome, New Orleans, Louisiana USA**

**Sponsored by the International Society for Computers and Their Applications (ISCA)**

PDCCS-2008 is a major forum to address, explore and exchange information on the state-of-the-art in all areas of Parallel and Distributed Computing and Communication Systems, their modeling, simulation, design, use, performance, and impact. The program committee is soliciting papers describing original unpublished research in all of these topic areas, including theoretical, experimental, and commercial works. The conference will also include a **BEST PAPER AWARD given for a paper presented at the conference**. Topics include, but are not limited to, the following research areas:

**1. Parallel Architectures and Systems**

Message passing and shared memory systems; General-purpose and special-purpose architectures; Multi-thread/Multi-core; Tightly-coupled systems, clusters, Grid; Reconfigurable systems; Interconnection networks; I/O and storage systems; Design issues (low power, scalability, etc.)

**2. Parallel and Distributed Algorithms**

Mapping, scheduling, load balancing; Routing, communication, synchronization; Fault tolerance; Security; Query processing

**3. Parallel and Distributed Systems Software**

Languages, compilers, OS; Programming environments and tools; Real-time systems; Resource management and allocations; Middleware; Data mining; Performance modeling and evaluation

**4. Parallel and Distributed Applications**

Scientific computing; Large-scale simulation and optimization; Multimedia computing; Grid and Internet

applications; Mobile computing; Computational biology, chemistry, geometry, physics; Digital signal and image processing; Sensor networks applications

**5. Communication Systems**

Architecture of network systems (e.g., switches and routers); Software routers; Network processors and network subsystems; Network operating systems; Optical network systems; Coding and high-speed transmission

**6. Network Protocols**

Ad-hoc and sensor networking; Wireless communications and networking; Internet protocols; Network security; Optical networking; Performance analysis systems; Coding and high-speed transmission

**7. Multimedia and Service Networking**

Multimedia communications and services; Real-time networking; Quality-of-Service; Performance modeling; Networked real-time embedded systems; Services on-demand

**Instructions for Authors**

Papers will be accepted ONLY BY ELECTRONIC SUBMISSION in PDF format. Include a cover page containing title, author's name(s), address, affiliation, email address, telephone number and topic area. In cases of multiple authors, all correspondence will be sent to the first author unless otherwise requested. Authors must submit a full paper (no more than 15 double spaced pages) by **APRIL 4, 2008**. **All submissions must be uploaded through the conference web page: <https://secure.myhostadvantage.com/V0015065FC/con-reg/default.asp?ConID=73>** . If you encounter any difficulties during submission, please contact: [isca@ipass.net](mailto:isca@ipass.net).

The submitted manuscript should closely reflect the final paper as it will appear in the proceedings, which will be a maximum of 6 pages (+2 pages with additional page fees) in ISCA format. (See <http://www.isca-hq.org/sample-isca-manuscript-format.pdf>)

**Conference Chair:**  
**Dr. Soo-Young Lee**  
Auburn University

**Program Chair for Computation:**  
**Dr. Joseph Jacob**  
Jet Propulsion Laboratory

**Program Chair for Communication:**  
**Dr. Dimitrios Serpanos**  
University of Patras

**IMPORTANT DATES**

<b>Paper Submission Deadline:</b>	<b>April 4, 2008</b>
<b>Notification of Acceptance:</b>	<b>May 9, 2008</b>
<b>Registration and Camera-ready Manuscripts Due:</b>	<b>June 6, 2008</b>