

Barcelona, the venue for Cluster2006

Barcelona is the capital of Catalonia. The city's two thousand year history has left its mark on Barcelona's architectural, artistic, and cultural heritage. Its excellent international communications, its Mediterranean climate, and its cosmopolitan atmosphere make it a privileged city indeed.

Barcelona is Europe's southernmost port, where Romans, Arabs, Christians, and other civilizations have given the city a multicultural flavor. Streets and squares are full of monuments and sculptures, both classic and Mediterranean, evidence of a great passion for art that makes Barcelona an open-air museum.

On the day before the start of Cluster2006, September 24th, Barcelona once again celebrates La Mercè, its Patron Saint Festival. Like a last explosion of summer before autumn, La Mercè is a festival of festivals, concentrating hundreds of activities such as the following in a few days:

- Barcelona Musical Action: to discover new sound ideas
- Barcelona Street Arts: with artists who perform within reach of the audience
- The Festival of Tradition: human towers, capgrossos (dwarves with big heads), giants, and an entire menagerie of festive animals, accompanied by guests from Mediterranean countries
- The Festival in the Sky: acrobatic events including jets, balloons, and gliders
- The Festival of Fire: all types of sparks, from the pyrotechnical music show to the correfoc (literally a fire-run)

The list is long and tends to include over 500 activities with a broad range of appeal. La Mercè is the festival of a thousand faces.

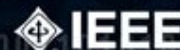
La Mercè has become the most popular festival in Barcelona, thanks to the collaboration of organizations from all over the city. Events for La Mercè take place in many parts of the city, with the overall program centered around Mediterranean culture. In less than a week, Barcelona brings together a program in which everyone participates, including street art, street theater, concerts, traditional dance, and more...

We hope to see you in Barcelona, enjoying both Cluster2006 and La Mercè.

CLUSTER 2006

IEEE INTERNATIONAL CONFERENCE ON CLUSTER COMPUTING

BARCELONA, 25-28 SEPTEMBER
www.cluster2006.org



Generalitat de Catalunya
Consell Interdepartamental de Recerca
i Innovació Tecnològica (CIRIT)



Barcelona
Supercomputing
Center



CLUSTER 2006

In less than a decade, clusters of commodity PCs have become the most cost-effective computing platforms for executing a wide range of high performance applications from molecular biology simulations to search and indexing on the Internet.

In spite of countless deployed platforms and resounding application successes, many research and development challenges remain for achieving better cluster performance, scalability, and usability. The IEEE TCSC sponsored International Conference on Cluster Computing 2006 provides an open forum for researchers, practitioners, and users to present and discuss issues, directions, and results that will shape the future of cluster computing.

As cluster architecture is becoming a more mature field of application it remains particularly important to maintain an event that links academic interests and new ideas to experience reports of practitioners and application developers. In addition, Cluster 2006 will be collocated with Grid2006 making the event doubly appealing.

SCOPE

Cluster 2006 welcomes paper and poster submissions from engineers and scientists in academia and industry describing original research work in all areas of cluster computing. Topics of interest include, but are not limited to:

Cluster Networking:

- High-Speed System Interconnects
- Lightweight Communication Protocols
- Fast Message Passing Libraries
- Networking Cost/Performance

Performance Analysis and Evaluation:

- Monitoring and Profiling Tools
- Performance Prediction and Modeling
- Performance Analysis and Visualization

Cluster Management and Maintenance:

- Cluster Security and Reliability
- Tools for Managing Clusters
- Job and Resource Management

Cluster Software and Middleware:

- Single-System Image Services
- Software Environments and Tools for Application Building
- Standard Cluster Libraries

Cluster Storage and Cluster I/O Subsystems:

- I/O Libraries
- Realtime I/O
- Distributed File Systems and RAIDs

Clustering for High Availability:

- Protocols and APIs
- Highly Available Data Management
- Highly Available Applications
- Managing Enterprise Clusters
- Service Level Agreements/Objectives

Applications:

- Scientific Applications
- Data Distribution and Load Balancing
- Algorithms for Distributed Applications
- Innovative Cluster Applications
- Scalable Internet Services on Clusters

Grid Computing and Clusters:

- Cluster Integration in Grids
- Network-Based Distributed Computing
- Cluster-Based Grid Services

TECHNICAL PAPERS

Format for submission: Full paper drafts, not to exceed 25 double-spaced, numbered pages (including title, author affiliations, abstract, keywords, figures, tables and bibliographic references) using 12 point font on 8.5x11-inch pages with 1-inch margins all around. A web-based submission mechanisms will be activated on the conference web site a few weeks before the submission deadline. Authors should submit a PostScript (level 2) or PDF file. Hard copy submissions will not be accepted.

IMPORTANT DATES

- Paper submission due April 28, 2006
- Workshop submission due February 2, 2006
- Tutorial submission due April 28, 2006
- Panel proposal due June 30, 2006
- Exhibition proposal due July 15, 2006
- Conference September 25-27, 2006
- Post-Conference Workshops and Tutorials September 27-28, 2006

ORGANIZING COMMITTEE

General co-chairs: Toni Cortés (Universitat Politècnica de Catalunya)
Ira Pramanick (Sun Microsystems Inc.)

General vice-chair: Mateo Valero (Universitat Politècnica de Catalunya)

Program chair: Bill Gropp (Argonne National Laboratory)

Finances and exhibit/sponsor chairs: Rosa M. Badia (Universitat Politècnica de Catalunya),
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