



CF '04

2004 ACM International Conference on Computing Frontiers

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Sponsored by ACM – SIGMICRO

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The increasing needs of present and future computation-intensive applications have stimulated research in new and innovative approaches to the design and implementation of high-performance computing systems. This challenging boundary between state of the art and innovation constitutes the *computing frontiers*, which needs to push forward and provide the computational support required for the advancement of all science domains and applications. This conference will focus on a wide spectrum of advanced technologies and radically new solutions and is designed to foster communication between the various scientific areas and disciplines involved.

Authors are invited to submit papers on all areas of innovative computing systems which extend the current frontiers of computer science and engineering and that will provide advanced systems for current and future applications.

Papers are sought on theory, methodologies, technologies, and implementations concerned with innovations in computing paradigms, computational models, architectural paradigms, computer architectures, development environments, compilers, operating environments, *etc.* Main topics include, but are not limited to, the following.

- Pervasive and ubiquitous computing
- Embedded processing and networking
- Wearable computing
- Systems and networks on chip
- Grid computing
- Parallel computing systems
- Clustered computing systems and server farms
- High-performance processors
- Application-specific computing systems
- High-performance parallel storage and I/O systems
- High-performance networked storage systems
- Resilient and dependable computing systems
- Autonomous intelligent computing systems
- Nanotechnologies for high-performance computing
- Quantum computing
- Molecular computing
- Computational neuroscience
- Neuromorphic computing
- Evolutionary systems
- Computing systems for bioinformatics
- Computing systems for knowledge processing
- Computing systems for virtual environments

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Submission details and all information concerning the symposium can be found at the conference web site (<http://www.computingfrontiers.org>).

Acceptance/rejection will be emailed by December 20, 2003. The final manuscript will be due January 24, 2004. Submission implies that at least one author will register at the conference and present the paper.

Web Site: <http://www.computingfrontiers.org>