Announcement and Call for Papers

The 11th Annual International Symposium on High Performance Computing Systems

HPCS'97

Crowne Plaza Hotel, Winnipeg, Manitoba, Canada

July 10th - 12th, 1997

www: http://www.cs.umanitoba.ca/~hpcs97
e-mail: hpcs97@cs.umanitoba.ca

The 11th Annual International symposium on High Performance Computing Systems (HPCS'97) will be held July 10th to 12th, 1997 at the Crowne Plaza Hotel in downtown Winnipeg, Manitoba, Canada. HPCS'97 is hosted by the Department of Computer Science at the University of Manitoba with the assistance of the sponsoring organization Super*Can.

The international symposium covers all aspects of high performance computing; both applied as well as theoretical. Topic areas of interest include architecture, enabling technologies, software systems, algorithms, and applications for parallel, distributed, or vector systems. However, papers addressing all aspects of high performance computing are also welcome. The symposium will be fully refereed and submissions are expected to represent exceptional work.

The symposium will include presentations of accepted technical papers, presentations by invited distinguished speakers, and vendor exhibits in an atmosphere which promotes conversation and collaboration. Both national and international participation is encouraged. As well, historically, a number of organizational meetings have also been organized to coincide with this symposium.

The symposium proceedings will be published in paper format (which will be available at the symposium) and possibly also in CD-ROM format with full text indexing. A small selection of 'best papers' will be determined

after the conference and all participants will be advised of such. The possibility of re-publishing these papers in a special journal issuance is currently being considered.

TOPICS

The following topics are suggested as particular examples of interest to the symposium, however, submissions are not limited to these topics. All submissions will be reviewed in context of their relevance to high performance computing systems.

- High Performance Applications (e.g. scientific, commercial, etc.)
- Distributed Systems and Advanced Applications (e.g. multimedia, cooperative systems)
- Scaleable and Interoperable Systems and Associated Standards
- Software Systems (e.g. operating system support, middleware, development environments, tools, distributed objects)
- Architecture (e.g. VLSI, SIMD, MIMD, parallel, vector, special-purpose)
- Interconnection Networks (e.g. ATM based, bus-based, optical)
- Communications (e.g. routing algorithms, switching techniques, wireless, mobile)
- Visualization (e.g. scientific visualization, debugging and load balancing tools)
- Photonics and Optical Computing
- Performance Issues (e.g. benchmarks, performance measurement, evaluation and prediction)
- Modeling and Simulation of High Performance Systems
- Advanced Compilation Techniques (e.g. parallelizing compilers)
- Programming Languages for Parallel and other High Performance Computing Environments
- Parallel/Distributed/Vector Algorithms
- Reliability and Fault Tolerance
- Embedded and Real Time Systems
- Digital Signal Processing
- Neural Computing, Genetic Algorithms and their applications
- Systolic and Cellular Automaton (CA) Techniques
- Issues in High Performance Computing (e.g. evolving paradigms such as NOW/COW, PIM Systems as well as grand challenge problems)

ORGANIZATION

General Chair: Dr. Brian d'Auriol
                        Dept. of Computer Science
                        University of Manitoba
                        E-mail: bdauriol@cs.umanitoba.ca

Program Chair: Dr. Peter Graham
                        Dept. of Computer Science
                        University of Manitoba
                        E-mail: pgraham@cs.umanitoba.ca

Advisory Chair: Dr. Virendra Bhavsar
                        Faculty of Computer Science
                        University of New Brunswick
                        E-mail: bhavsar@unb.ca

Proceedings Chair: Dr. Ken Barker
                        Dept. of Computer Science

University of Manitoba
E-mail: barker@cs.umanitoba.ca

Local Arrangements: Ms. Lynne Romuld
Dept. of Computer Science
University of Manitoba
E-mail: hpcs97@cs.umanitoba.ca

INTERNATIONAL PROGRAM COMMITTEE

Ali E. Abdallah, University of Reading, U.K.

Tarek S. Abdelrahman, University of Toronto, Canada

Hamid S. Arabnia, University of Georgia, USA

Luc Bauwens, University of Calgary, Canada

Virendra Bhavsar, University of New Brunswick, Canada

David Blight, University of Manitoba, Canada

Frank Dehne, Carleton University, Canada

Edward Frietman, Delft University of Technology, The Netherlands

Qian-Ping Gu, University of Aizu, Japan

Weijia Jia, City University of Hong Kong, Hong Kong

Kequin Li, State University of New York, New Paltz, USA

Piyush Maheshwari, University of New South Wales, Australia

Yi Pan, University of Dayton, USA

Alexander Reinefeld, Paderborn Center for Parallel Computing, Germany

Hong Shen, Griffith University, Australia

Ajit Singh, University of Waterloo, Canada

Ivan Stojmenovic, University of Ottawa, Canada

Ronald Unrau, University of Alberta, Canada

Ramachandran Vaidyanathan, Louisiana State University, USA

Vincent Van Dongen, Centre de Recherche Informatique de Montreal (CRIM), Canada

Alan S. Wagner, University of British Columbia, Canada

Rod Wittig, University of Calgary, Canada

Weimin Zheng, Tsinghua University, China

SUBMISSION OF PAPERS

Submit papers of ten or less pages to the program chair by February 28th, 1997. Papers are to be numbered starting from page one, be single spaced with minimum of 11pt font and are to include an abstract of 250 words or less together with up to eight keywords describing the paper's content. Electronic submission of papers in structured PostScript format via e-mail directly to the program chair are acceptable and encouraged for the review process. If not submitting an electronic version, please submit four hardcopy originals to the program chair at the address below. A final preparation format will be available upon notification of acceptance. Be advised that page charges may be assessed for those accepted papers exceeding the page limit. Submitted papers greatly exceeding the page limit or otherwise deviating significantly from the requested format may be rejected without review.

All papers will be fully refereed by a minimum of two reviewers with background in the areas of the reported work. All authors will receive referees' comments. Such comments will be divided into two categories: required

and optional changes. All required changes will need to be incorporated prior to final acceptance in the symposium proceedings.

EVALUATION PROCESS

All papers submitted will be evaluated based on the following criteria:
- contribution to the area of research,
- novelty of the approach,
- soundness of results,
- relevance to high performance computing systems, and
- clarity of presentation.

IMPORTANT DATES

February 28th, 1997	Manuscripts must be received by the program chair by this date
April 15th, 1997	Authors receive notification of acceptance
May 20th, 1997	Final, camera-ready copy must be received by this date (both hardcopy and electronic versions will be required)
July 10th - 12th,1997	HPCS'97 Symposium

Authors of accepted papers will be requested to submit their conference registration materials (including 50% of their registration fee) by May 20th, 1997. This will allow the organizers to cover the publications costs ahead of time. Conference registration rates will be available shortly (see the web page for information updates).

GENERAL CHAIR'S ADDRESS

Please direct all correspondence to:
Dr. Brian J. d'Auriol
(Assistant Professor of Computer Science)
General Chair, HPCS'97
Department of Computer Science
545 Machray Hall
University of Manitoba
Winnipeg, Manitoba
Canada R3T 2N2
phone: (204) 474-8831 (direct line)
          (204) 474-8313 (office)
fax: (204) 269-9178
e-mail: bdauriol@cs.umanitoba.ca
WWW: http://www.cs.umanitoba.ca/~bdauriol/

PROGRAM CHAIR'S ADDRESS

Please direct all submissions or questions concerning the submission, evaluation, or selection process to:
Dr. Peter Graham
(Assistant Professor of Computer Science)
Program Chair, HPCS'97
Department of Computer Science
545 Machray Hall

University of Manitoba
Winnipeg, Manitoba
Canada R3T 2N2
phone: (204) 474-8837 (direct line/voice mail)
fax: (204) 269-9178
e-mail: pgraham@cs.umanitoba.ca
WWW: http://www.cs.umanitoba.ca/~pgraham/

LOCAL ARRANGEMENTS

Ms. Lynne Romuld
(Administrative Assistant)
Local Arrangements Chair, HPCS'97
Department of Computer Science
545 Machray Hall
University of Manitoba
Winnipeg, Manitoba
Canada R3T 2N2
phone: (204) 474-8669 (direct line/messages)
fax: (204) 269-9178
e-mail: hpcs97@cs.umanitoba.ca

Last Updated: Nov. 18th, 1996.