

CALL FOR PARTICIPATION

Workshop on Parallel Satisfiability Solving: SAT and beyond SAT, Parallel Solving on New Architectures (WPSS'09)

As part of
The 2009 International Conference on High Performance Computing & Simulation
(HPCS 2009)

Leipzig, Germany
June 21 - 24, 2009

Submission Deadline: March 22, 2009

Brief Description:

During the last decade, the fundamental Satisfiability Problem (SAT) has been extensively studied. This interest of the community significantly grows because of its conceptual simplicity and its ability to describe a wide set of various problems, including hardware verification, planning, automated reasoning, and others. Consequently, there is an increasing demand for high performance SAT-solving algorithms in industry. In spite of the actual trend in processor development, which is moving from single-core to multi-core CPU, there exist few parallel solving approaches dedicated to SAT problems using shared memory architectures.

This workshop will focus on SAT and beyond SAT solving techniques exploiting parallelism in emerging massively multi-threaded and multi-core architectures. Recently, Global Processing Units (GPUs) have evolved to address programming of general-purpose computations. We will particularly focus on the use of general-purpose GPUs and coprocessor computing techniques to overcome traditional barriers to parallelization.

We invite papers in this emerging discipline which includes, but not limited to, the following areas of interest.

- Satisfiability Solving Using Shared Memory
- General-Purpose Computation on GPUs (GPGPU) for SAT
- Reconfigurable Computing and FPGA for SAT
- Parallel SAT, MaxSAT, #SAT and QBF pre-processing

Paper Submissions:

Submitted papers must not have been published or simultaneously submitted elsewhere. Submission should include a cover page with authors' names, affiliation addresses, fax numbers, phone numbers, and email addresses. Please, indicate clearly the corresponding author and include up to 6 keywords from the above list and an abstract of no more than 350 words. The full manuscript should be at most 7 pages using the two-column IEEE format. Additional pages will be charged additional fee. Please include page numbers on all submissions to make it easier for reviewers to provide helpful comments. All submissions should be appropriately anonymized (i.e., papers should not contain author names, affiliations, or obvious citations). Please submit a PDF copy of your full manuscript as attachment via the email michael.krajecki@univ-reims.fr. Your submission will be acknowledged within 48 hours.

Only PDF files will be accepted. Each paper will receive a minimum of three reviews. Authors of accepted papers must guarantee that their papers will be presented at the workshop. Accepted papers will be published in the conference proceedings which will be available at the time of the meeting.

If you have any questions about paper submission or the workshop, please contact the organizers.

Important Dates:

Paper Submissions: ----- **March 22, 2009**
Acceptance Notification: ----- **April 10, 2009**
Camera Ready Papers and Registration Due: ----- **April 24, 2009**

Workshop Organizers:

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Workshop Program Committee:

All submitted papers will be rigorously reviewed by the special session technical program committee members.

Workshop International Program Committee:

François Bodin, IRISA, Rennes, France
Clementin Tayou Djamegni, University of Dschang, Cameroon

Youssef Hamadi, Microsoft Research Cambridge, U.K.
Marijn Heule, TU Delft, The Netherlands
Bertrand Le Cun, Université de Versailles Saint-Quentin en Yvelines, France
Tobias Schubert, Albert-Ludwigs-University of Freiburg, Germany
Carsten Sinz, University of Karlsruhe, Germany
Peter Stuckey, University of Melbourne, Australia

If you have any questions about conference paper submission, please contact Conference Program Chair: **Waleed W. Smari**, Dept. of Electrical and Computer Engineering, University of Dayton, 300 College Park, Dayton, OH 45469-0226, USA, Voice: (937) 229-2795, Fax: (937) 229-4529, Email: Waleed.Smari@notes.udayton.edu or consult the conference web site at <http://cisedu.us/cis/hpcs/09/main/callForPapers.jsp>.