International Workshop
IRMM'10

Information Retrieval by Matrix Methods on Supercomputer Infrastructures

Call for Papers

As part of the ACM
24th International Conference on Supercomputing
ICS'10
June 1-4, 2010
Epochal Tsukuba, Tsukuba, Japan

SCOPE AND OBJECTIVES

Information retrieval (IR) over large data sets, like web-pages, libraries, image
collections is an important application domain for high-performance computing.
The algorithmic foundations of IR depend on linear and multilinear algebra theory
and algorithms. A major challenge is that the scale of IR problems can be enormous
and the data fluid. To assure the delivery of accurate responses to queries and
other IR operations within acceptable time constraints it is critical that the
design of algorithms and the engineering of their implementation on HPC platforms
combine effective dimensionality reduction, IR specific domain knowledge, and
aggressive exploitation of the software, architecture and hardware infrastructure.
The goal of this workshop is to bring together scientists engaged in the development
of algorithms and tools for high-performance IR on state-of-the-art systems
(multicores, GPUs and Grid environments) in order to present their latest results in
this exciting area of research.

Major workshop topics include:

- Innovative Matrix and Tensor-Based Models for IR
- Novel Fast Linear Algebra Solvers and Environments for IR
- Solving Update--Downdate Problem of IR
- Specialized Approaches for Solving Sparse- and Dense- Vector
  IR Applications
- High-Performance Implementations of IR Matrix--Algorithms
- Solving IR-Problems on a Grids
- Formal Comparisons of Matrix-Based to Matrix-Free Methods

WORKSHOP ORGANIZERS
    * Marian Vajtersic, University of Salzburg, Austria
    * Michael W. Berry, University of Tennessee, USA
    * Efstratios Gallopoulos, University of Patras, GREECE

SUBMISSIONS
We invite submissions which bring original work related (but not limited
only)to the above topics, which has not been submitted to other conferences or
workshops.

Submissions should not exceed 8 pages (including figures, tables and
references) with single-spaced double-column pages in PDF format. The camera-ready
version of the paper should follow the ACM format:
http://www.acm.org/sigs/publications/proceedings-templates

The papers should be sent via e-mail to the address:
marian@cosy.sbg.ac.at. (Marian Vajtersic).

IMPORTANT DATES
Paper Submissions: ------------------------------------- March 15, 2010
Acceptance Notification: ---------------------------------- March 28, 2010 Camera
Ready Papers and Registration Due: ------------------ April 14, 2010 Workshop
Date:-- June 1, 2010
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***For more information about the IRMM'10 workshop, please point directly to

  http://www.cosy.sbg.ac.at/events/ws-irmm10.html

or

  http://www.c.csce.kyushu-u.ac.jp/~inoue/ICS2010WorkshopTutorial.html

***For more information about the ICS'10 conference, please point to:

  http://www.ics-conference.org/
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