

The International Workshop on Parallel Data Mining (PDM06)

in conjunction with the 17th European Conference on Machine Learning (ECML)

and the 10th European Conference on Principles and Practice of Knowledge Discovery in Databases (PKDD)

<http://www.inf.uni-konstanz.de/pdm06>

Area and Scope

Recently major processor manufacturers have announced a dramatic shift in their paradigm to increase computing power over the coming years. Instead of focusing on faster clock speeds and more powerful single core CPUs, the trend clearly goes towards multi core systems. This will also result in a paradigm shift for the development of algorithms for computationally expensive tasks, such as data mining applications. Obviously, work on parallel algorithms is not new per se but concentrated efforts in the many application domains are still missing. Multi-core systems, but also clusters of workstations and even large-scale distributed computing infrastructures provide new opportunities and pose new challenges for the design of parallel and distributed algorithms.

Since data mining and machine learning systems rely on high performance computing systems, research on the corresponding algorithms must be on the forefront of parallel algorithm research in order to keep pushing data mining and machine learning applications to be more powerful and, especially for the former, interactive.

The workshop focus will encompass data mining and machine learning approaches from low to high degree of parallelism, embracing algorithms for tightly coupled shared-memory systems (as will become widely available using multi core systems) and also distributed approaches making use of the increasingly mature grid infrastructures.

Topics of Interest

Contributions are sought in all areas of high performance computing in Data Mining and Machine Learning, in particular:

Systems

distributed, grid and peer-to-peer computing
parallel computing, multi-core systems
distributed and shared-memory systems

Methods

mining distributed datasets
meta learning
distributed, partial model learning

Platforms and Tools

parallel data mining workflow management environments
distributed systems and tools for data mining and data exploration

We also welcome submissions on data mining for the analysis of distributed systems as well as reports on applications of particular interest.

Important Dates

Paper submission: June 28th, 2006 (12pm GMT)

Camera ready due: August 16th, 2006

Notification: July 31th, 2006

Workshop: September 18th, 2006

Paper Submission

Authors are invited to submit original and unpublished manuscripts to pdm06-submission@inf.uni-konstanz.de. Submitted papers will undergo a peer-review process. Final versions of accepted papers will appear in the workshop proceedings. Submission implies the willingness of at least one of the authors to register and present the paper. The instructions for authors and the LaTeX packages can be found at <http://www.springer.de/comp/lncs/authors.html>. Manuscripts should not exceed 12 pages in this format.

Workshop Chairs:

- Giuseppe Di Fatta, University of Konstanz (Germany) and ICAR-CNR (Italy)
- Michael R. Berthold, University of Konstanz, Germany
- Srinivasan Parthasarathy, The Ohio State University, USA

Publicity Chair:

- Matthew Otey, The Ohio State University, USA

Program Committee:

- Gagan Agrawal, Ohio State University, USA
- Pradeep Dubey, Intel Corp., USA
- Mario Cannataro, University "Magna Græcia" of Catanzaro, Italy
- Alok Choudhary, Northwestern University, USA
- Salvatore Gaglio, University of Palermo, Italy
- Robert Grossman, University of Illinois-Chicago, USA
- Yike Guo, Imperial College, UK
- Ruoming Jin, Kent State University, USA
- Hillol Kargupta, University of Maryland, Baltimore County, USA
- George Karypis, University of Minnesota, USA
- Masaru Kitsuregawa, University of Tokyo, Japan
- Shonali Krishnaswamy, Monash University, Australia
- Shinichi Morishita, University of Tokyo, Japan
- Salvatore Orlando, University of Venice, Italy
- Matthew Otey, The Ohio State University
- Raffaele Perego, CNR, Italy
- Omer F. Rana, Cardiff University, UK
- Sanjay Ranka, University of Florida, USA
- Assaf Schuster, TECHNION, Israel Institute of Technology, Israel
- Domenico Sacca', ICAR-CNR and University of Calabria, Italy
- Krishnamoorthy Sivakumar, Washington State University, USA
- Domenico Talia, University of Calabria, Italy
- Maurizio Urso, ICAR-CNR, Italy
- Jason T. L. Wang, New Jersey Institute of Technology, USA
- Ran Wolff, University of Maryland at Baltimore County, USA
- Mohammed J. Zaki, Rensselaer Polytechnic Institute, USA
- Albert Y Zomaya, University of Sydney, Australia