

First International Workshop on
“**High Performance and Energy-Aware Solutions for
Data Mining and Wireless/Mobile Applications (IDMWM 2011)**”

http://iwcmc.org/files/CFP/CFP_High_Performance_Low_%20Energy_%20DM_WM.pdf

Co-Located with the

“**7th International Wireless Communications and
Mobile Computing Conference (IWCMC 2011)**”

<http://iwcmc.org>

July 5-8, 2011, Bahçeşehir University, Istanbul, Turkey

Aims and Scope

This workshop hopes to provide a forum for presenting the latest research and debating directions, challenges, and novel ideas about building high performance or energy efficient computing systems for data mining and Wireless/Mobile applications. This problem can be addressed at one or more platform layers such as software, language and compiler design, computer architecture, hardware, embedded systems, and networking. Researchers coming to these issues from these different fields will gain the opportunity to interact and learn from one another.

Areas of Interest - Relevant topics include (but are not limited to):

I. Energy Aware Solutions for Data Mining and Wireless/Mobile Applications

- Multi-layer energy optimizations and awareness across layers: Application, Compiler, Operating Systems, Architecture, Hardware.
- Energy profiling and accounting
- Energy Benchmarking and Assessment
- Energy reduction in communications over sensor networks
- Energy and thermal-aware techniques for scheduling, memory management, and quality of service
- Low energy displays
- Measurement and modeling

II. High Performance Solutions for Data Mining and Wireless/Mobile Applications

- Multi-layer performance optimizations across layers: Application, Compiler, Operating Systems, Architecture, Hardware.
- Performance profiling and accounting
- High Performance Computing Benchmarking and Assessment
- High Performance Interconnection Networks
- High Performance Computing Software Monitoring and Measurement
- High Performance Computing for Mobile and Wireless Applications
- Multi-Core Architectures and Support
- Dynamic frequency and voltage scaling
- Measurement and modeling

III. New applications for Data Mining and Wireless/Mobile Applications

- Making sense out of sensors
- Machine to machine applications
- Context aware applications
- Personal assistant devices
- Smart devices
- Mobile data mining, opinion mining, sentiment mining
- Text mining, multimedia mining, stream data mining
- Application to multi-core, data center, and embedded systems
- Scalable and/or parallel/distributed algorithms for various mining tasks like classification, clustering, sequences, associations, trend and deviation detection, etc.
- Frameworks for KDD systems, and parallel or distributed mining.

Submission Guidelines

Prospective authors are invited to submit technical papers electronically through EDAS (<http://edas.info/>). More information can be found at the conference website (<http://iwcmc.org>). Authors need to submit original technical papers—up to 6 pages of length, using the EDAS link: <http://edas.info/N9425> and select the “**High Performance and Energy-Aware Solutions for Data Mining and Wireless/Mobile Applications**” Workshop for possible publication in the IWCMC 2011 Conference Proceedings, which will be included in IEEE Digital Library. Selected papers will be further considered for possible publication in three special issues in the following Journals:

1. Wiley Journal of Wireless Communications and Mobile Computing (WCMC): <http://www3.interscience.wiley.com/journal/76507157/home>
2. The International Journal of Sensor Networks (IJSNet): <http://www.inderscience.com/browse/index.php?journalCODE=ijsnet>
3. The International Journal of Autonomous and Adaptive Communications Systems (IJAAACS): <http://www.inderscience.com/ijaaacs>

There will also be best paper awards, one best symposium award, and one best Workshop award.

Important Dates

Paper Submission Deadline:	17 January 2011
Paper Acceptance Notification:	15 March 2011
Camera-ready Paper Submissions:	1 April 2011
Registration Deadline for Authors:	1 April 2011