

# DMIN'12

**The 8<sup>th</sup> International Conference on Data Mining**  
July 16-19, 2012 - Las Vegas, Nevada, USA



## CALL FOR PAPERS

### DMIN'12 The 2012 International Conference on Data Mining

**Date and Location: July 16-19, 2012**  
**Monte Carlo Resort & Casino, Las Vegas, Nevada, USA**

<http://www.dmin-2012.com>  
<http://www.world-academy-of-science.org>

**\* Extension of submission deadline \***

You are invited to submit a full paper for consideration. All accepted papers will be published in the DMIN conference proceedings (in printed book form; later, the proceedings will also be accessible online). Those interested in proposing workshops/sessions, should refer to the relevant sections that appear below.

SCOPE: Topics of interest include, but are not limited to, the following:

- Data Mining Tasks
  - Regression/Classification
  - Time series forecasting
  - Segmentation/Clustering/Association
  - Deviation and outlier detection
  - Explorative and visual data mining
  - Web mining
  - Mining text and semi-structured data
  - Temporal and spatial data mining
  - Multimedia mining (audio/video)
  - Others
- Data Mining Algorithms
  - Artificial neural networks
  - Fuzzy logic and rough sets
  - Decision trees/rule learners
  - Support vector machines
  - Evolutionary computation/meta heuristics
  - Statistical methods
  - Collaborative filtering
  - Case based reasoning
  - Link and sequence analysis
  - Ensembles/committee approaches
  - Others
- Data Mining Integration
  - Mining large scale data

- Distributed and grid based data mining
- Data and knowledge representation
- Data warehousing and OLAP integration
- Integration of prior/domain knowledge
- Metadata and ontologies
- Agent technologies for data mining
- Legal and social aspects of data mining
- Others
- Data Mining Process
  - Data cleaning and preparation
  - Feature selection and transformation
  - Attribute discretisation and encoding
  - Sampling and rebalancing
  - Missing value imputation
  - Model selection/assessment and comparison
  - Induction principles
  - Model interpretation
  - Others
- Data Mining Applications
  - Bioinformatics/Medicine
  - Business/Industrial
  - Engineering
  - Military/Security
  - Social science
  - Others
- Data Mining Software
 

We particularly encourage submissions of industrial applications and case studies from practitioners. These will not be evaluated using solely theoretical research criteria, but will take general interest and presentation stringer into consideration.
- Alternative and additional examples of possible topics include:
 

Data Mining for Business Intelligence; Emerging technologies in data mining; Computational performance issues in data mining; Data mining in usability; Advanced prediction modelling using data mining; Data mining and national security; Data mining tools; Data analysis; Data preparation techniques (selection, transformation, and preprocessing); Information extraction methodologies; Clustering algorithms used in data mining; Genetic algorithms and categorization techniques used in data mining; Data and information integration; Microarray design and analysis; Privacy-preserving data mining; Active data mining; Statistical methods used in data mining; Multidimensional data; Automatic data cleaning; Data visualization; Theory and practice (knowledge representation and discovery); Knowledge Discovery in Databases (KDD); Uncertainty management; Data reduction methods; Data engineering; Content mining; Indexing schemes; Information retrieval; Metadata use and management; Multidimensional query languages and query; Multimedia information systems; Search engine query processing; Pattern mining; Applications (examples: data mining in education, marketing, finance and financial services, business applications, medicine, bioinformatics, biological sciences, science and technology, industry and government, ...).

## **SPECIAL SESSION**

DMIN'12 will host the following special session:

Special Session on Real-World Data Mining Applications, Challenges, and Perspectives

See [http://www.dmin-2012.com/special\\_sessions.htm](http://www.dmin-2012.com/special_sessions.htm) for details

## **TUTORIALS AND INVITED TALKS**

see <http://www.dmin-2012.com/tutorials.htm> for details

## **USEFUL WEB LINKS**

To see the DBLP list of accepted papers of DMIN'10, go to

<http://dblp.uni-trier.de/db/conf/dmin/dmin2010.html>.

The main web site of DMIN'12 can be found at <http://www.dmin-2012.com>.

The web site of WORLDCOMP'12 can be found at <http://www.world-academy-of-science.org>.

## **IMPORTANT DATES**

April 12, 2012 (extended): Submission of papers (about 5 to 7 pages)

April 26, 2012 (extended): Notification of acceptance (approx.; possibly + 7 days)

May 12, 2012 (extended): Final papers + Copyright/Consent + Registration

July 16-19, 2012: The 2012 International Conference on Data Mining (DMIN'12)

## **ACADEMIC CO-SPONSORS**

Currently being prepared - The sponsors will include a number of active research labs and centers that have helped to shape our field. The Academic sponsors of the last offering of DMIN & WORLDCOMP included research labs and centers affiliated with United States Military Academy, Harvard University, MIT, Argonne National Lab., University of Illinois at Urbana-Champaign, University of Minnesota, University of Texas at Austin, Georgia Institute of Technology, George Mason University, Vienna University of Technology, University of Siegen, Russian Academy of Sciences, University of Iowa, SECLAB (Italy), University of North Dakota, Texas A&M University, National Institute for Health Research, International Society of Intelligent Biological Medicine, Academy of Biomedical Sciences and Technologies, and European

Commission. For 2011, we will also include The Berkeley Initiative in Soft Computing/BISC of University of California, Berkeley (confirmed.) In recent offerings of WORLDCOMP/DMIN, corporate sponsors included: Google, Intel, Salford Systems, Element CXI, Synplicity, NIIT, SuperMicro, HPCNano, Council on Medical & Care Compunetics, Scientific Tech. Corp., HoIP, GridToday.

## **SUBMISSION OF PAPERS**

Prospective authors are invited to submit their papers by uploading them according to the instructions provided on the DMIN website via <http://www.dmin-2012.com/submission.htm>. Please follow the formatting and uploading instructions (different to practice at some other WORLDCOMP'12 conferences). Submissions must be uploaded by March 26, 2012 (extended deadline). Papers must not have been previously published or currently submitted for publication elsewhere. The length of the final/Camera-Ready papers (if accepted) will be limited to 7 (two-column IEEE style) pages.

Each paper will be peer-reviewed by two experts in the field for originality, significance, clarity, impact, and soundness. In cases of contradictory recommendations, a member of the conference programme committee will be charged to make the final decision (accept/reject) - often, this would involve seeking help from additional referees by using a double-blinded review process. In addition, all papers whose authors included a member of the conference program committee will be evaluated using the double-

blinded review process. (Essay/philosophical papers will not be refereed but may be considered for discussion/panels). All proceedings of WORLDCOMP will be published and indexed in: Inspec / IET / The Institute for Engineering & Technology, DBLP / CS Bibliography, and others. The printed proceedings will be available for distribution on site at the conference.

In addition to the publication of the proceedings, selected authors will be invited to submit extended versions of their papers for publication in a number of research books being proposed/contracted with various publishers (such as, Springer, Elsevier, ...) - these books would be composed after the conference. Also, many chairs of sessions and workshops will be forming journal special issues to be published after the conference.

## **MEMBERS OF PROGRAMME AND ORGANIZING COMMITTEES**

The list of Programme Committee of DMIN'12 will appear at:

<http://www.dmin-2012.com/committees.htm>

The DMIN'12 programme committee is currently being compiled. Many who have already joined the committee are renowned leaders, scholars, researchers, scientists and practitioners of the highest ranks; many are directors of research labs., members of National Academy of Engineering, fellows of various societies, heads/chairs of departments, program directors of research funding agencies, deans and provosts as well as members of chapters of World Academy of Science.

Programme Committee members are expected to have established a strong and documented research track record.

## **GENERAL INFORMATION**

The DMIN conference is being held jointly (same location and dates) with a number of other research conferences (WORLDCOMP). WORLDCOMP is the largest annual gathering of researchers in computer science, computer engineering and applied computing. We anticipate to have 2,000 or more attendees from over 85 countries.

WORLDCOMP 2012 will be composed of research presentations, keynote lectures, invited presentations, tutorials, panel discussions, and poster presentations. In recent past, keynote/tutorial/panel speakers have included: Prof. David A. Patterson (pioneer/architecture, U. of California, Berkeley), Dr. K. Eric Drexler (known as Father of Nanotechnology), Prof. John H. Holland (known as Father of Genetic Algorithms; U. of Michigan), Prof. Ian Foster (known as Father of Grid Computing; U. of Chicago & ANL), Prof. Ruzena Bajcsy (pioneer/VR, U. of California, Berkeley), Prof. Barry Vercoe (Founding member of MIT Media Lab, MIT), Dr. Jim Gettys (known as X-man, developer of X Window System, xhost; OLPC), Prof. John Koza (known as Father of Genetic Programming, Stanford U.), Prof. Brian D. Athey (NIH Program Director, U. of Michigan), Prof. Viktor K. Prasanna (pioneer, U. of Southern California), Dr. Jose L. Munoz (NSF Program Director and Consultant), Prof. Jun Liu (Broad Institute of MIT & Harvard U.), Prof. Lotfi A. Zadeh (Father of Fuzzy Logic), Dr. Firouz Naderi (Head, NASA Mars Exploration Program/2000-2005 and Associate Director, Project Formulation & Strategy, Jet Propulsion Lab, CalTech/NASA), and many other distinguished speakers. To get a feeling about the conferences' atmosphere, see the 2010 delegates photos available at: [www.pixagogo.com/1676934789](http://www.pixagogo.com/1676934789). Photos of the 2011 WORLDCOMP congress are available at <http://worldcomp.phanfare.com/5408606>.

An important mission of WORLDCOMP is "Providing a unique platform for a diverse community of constituents composed of scholars, researchers, developers, educators, and practitioners. The Congress makes concerted effort to reach out to participants affiliated with diverse entities (such as: universities, institutions, corporations, government agencies, and research centers/labs) from all over the world. The congress also attempts to connect participants from institutions that have teaching as their main mission with those who are affiliated with institutions that have research as their main mission. The congress uses a quota system to achieve its institution and geography diversity objectives."

One main goal of the congress is to assemble a spectrum of affiliated research conferences, workshops, and symposiums into a coordinated research meeting held in a common place at a common time. This model facilitates communication among researchers in different branches of computer science, computer engineering, and applied computing. The Congress also encourages multi-disciplinary and inter-disciplinary research initiatives; ie, facilitating increased opportunities for cross-fertilization across sub-disciplines.

**Remark regarding the ongoing defamatory campaign against WORLDCOMP conferences:**

As you might have noticed, there is a campaign running against WORLDCOMP conferences. DMIN is not mentioned explicitly, but since it is part of the congress, DMIN can be regarded as object of the statements ('fake conference', 'no reviews', 'plagiarism', etc.), too. However, the background of the campaign is not clear yet. The person who has been sending out harrasing emails for slandering WORLDCOMP conferences is using fake names. For DMIN, we can assure that there is a well documented review process. We can proof all reviews of past DMIN conferences and all decisions on the submitted papers. Reviewers have to document their qualifications (publications, reviewing for journals/conferences etc.). Furthermore, we provide a guideline for reviews and an evaluation scheme. We never heard of complaints regarding the DMIN reviews. All papers are assigned to 2-4 (sometimes even more) reviewers, and most of the papers were actually reviewed by 3 reviewers. This is well documented. If you have any questions on that subject, please contact the DMIN conference chair via [conference-chair@dmin-2012.com](mailto:conference-chair@dmin-2012.com).

In response to allegations made against Professor Hamid Arabnia and WORLDCOMP, news are posted at:

<http://www.world-academy-of-science.org/worldcomp12/ws/news2>

**MEASURABLE SCIENTIFIC IMPACT OF WORLDCOMP:**

As of February 5, 2012, papers published in WORLDCOMP set of proceedings have received 20,405 citations. In recent months (November 23, 2011 to February 5, 2012; ie, in about 75 days), there had been 4,545 citations to WORLDCOMP papers (about 1,800 citations per month). The above record is significant (thanks to the authors). As the result of high impact (based on citations) of WORLDCOMP papers, "Microsoft Academic Search" has listed each individual track of the congress among its compiled list of "Top Conferences". The citation record of WORLDCOMP set of proceedings is in fact higher than the citation data of many reputable journals in computer science and computer engineering. Citation data was obtained from <http://academic.research.microsoft.com/>).

You will find the web link to live citation data for DMIN at:

<http://academic.research.microsoft.com/Conference/1920/dmin-int-conf-on-data-mining/> .

Detailed information about citations to WORLDCOMP proceedings can be found at:

<http://www.world-academy-of-science.org/worldcomp12/ws/news> .

We look forward to receiving your submission.

Robert Stahlbock  
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