

3rd CALL FOR PAPERS

DMIN'11 The 2011 International Conference on Data Mining

Date and Location: July 18-21, 2011

Monte Carlo Resort & Casino, Las Vegas, Nevada, USA

http://www.dmin--2011.com http://www.world-academy-of-science.org

EXTENDED DEADLINE for Submission of Draft Papers: March 24, 2011

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 SESSIONS

All special sessions and workshops are open to attendees of all conferences held at WORLDCOMP'11.

DMIN'11 will be hosting the following special session – please see http://www.dmin-2011.com/special sessions.htm for details:

Real-World Data Mining Applications, Challenges, and Perspectives Chair: Mahmoud Abou-Nasr

It is planned to publish a special issue consisting of extended papers on real world data mining applications within Annals of Information Systems (Springer). Details will be published later on the DMIN'11 website as well as via a dedicated CfP.



TUTORIALS AND INVITED TALKS

All tutorials and invited talks are free to registered conference attendees of all conferences held at WOLDCOMP'11. Those who are interested in attending one or more of the tutorials are to sign up on site at the conference registration desk in Las Vegas. A complete & current list of WORLDCOMP Tutorials can be found via http://www.world-academy-of-science.org/worldcomp11/ws/tutorials.

DMIN'11 will host the following tutorials/invited talks:

- Gary M. Weiss, Fordham University, USA
 Tutorial on: Wireless and Smart Phone-Based Sensor Data Mining
- 2. Michael Mahoney, Stanford University, USA
 Tutorial on: Geometric Tools for Identifying Structure in Large Social and
 Information Networks
- Nitesh V. Chawla, University of Notre Dame, USA Invited Talk
- 4. Peter Geczy, AIST, Japan Invited Talk: Data Mining and Privacy: Water and Fire?

Please visit http://www.dmin--2011.com/tutorials.htm for details

USEFUL WEB LINKS

To see the DBLP list of accepted papers of DMIN'10, please go to http://dblp.uni-trier.de/db/conf/dmin/dmin2010.html.

The main web site of DMIN'11 can be found at http://www.dmin--2011.com.

The web site of WORLDCOMP'11 can be found at http://www.world-academy-of-science.org.

IMPORTANT DATES

March 10, 2011: Submission of papers

EXTENDED DEADLINE

March 24, 2011: Submission of papers

April 12, 2011: Notification of acceptance (+/- two days)

April 24, 2011: Final papers + Copyright/Consent + Registration

July 18-21, 2011: The 2011 International Conference on Data Mining (DMIN'11)

ACADEMIC CO-SPONSORS

Currently being prepared

The Academic sponsors of the last DMIN'10 included research labs and centers affiliated with (a partial list): University of California, Berkeley; University of Southern California; University of Texas at Austin; Harvard University, Cambridge, Massachusetts; Georgia Institute of Technology, Georgia; Emory University, Georgia; University of Minnesota; University of Iowa; University of North Dakota; NDSU-CIIT Green Computing & Comm. Lab.; University of Siegen, Germany; UMIT, Austria; SECLAB (University of Naples Federico II + University of Naples Parthenope + Second University of Naples, Italy); National Institute for Health Research; World Academy of Biomedical Sciences and Technologies; Russian Academy of Sciences, Russia; International Society of Intelligent Biological Medicine (ISIBM); The International Council on Medical and Care Compunetics; Eastern Virginia Medical School & the American College of Surgeons, USA.

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--2011.com/submission.htm. Please follow the formatting and uploading instructions (different to practice at some other WORLDCOMP'11 conferences). Submissions must be uploaded by March 10, 2011. 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 members of the Steering Committee of The 2010 congress included:

Dr. Selim Aissi (Chief Strategist, Intel Corporation, USA); Prof. Hamid Arabnia (ISIBM Fellow & Professor, University of Georgia; Associate Editor, IEEE Transactions on Information Technology in Biomedicine; Editor-in-Chief, Journal of Supercomputing, Springer; Advisory Board, IEEE TC on Scalable Computing); Prof. Ruzena Bajcsy (Member, National Academy of Engineering, IEEE Fellow, ACM Fellow, Professor; University of California, Berkeley, USA); Prof. Hyunseung Choo (ITRC Director of Ministry of Information & Communication; Director, ITRC; Director, Korea Information Processing Society; Assoc. Editor, ACM Transactions on Internet Technology; Professor, Sungkyunkwan University, Korea); Prof. Winston Wai-Chi Fang (IEEE Fellow, TSMC Distinguished Chair Professor, National ChiaoTung University, Hsinchu, Taiwan, ROC); Prof. Andy Marsh (Director HolP, Secretary-General WABT; Vice-president ICET and ICMCC, Visiting Professor, University of Westminster, UK); Dr. Rahman Tashakkori (Director, S-STEM NSF Supported Scholarship Program and NSF Supported AUAS, Appalachian State U., USA); Prof. Layne T. Watson (IEEE Fellow, NIA Fellow, ISIBM Fellow, Fellow of The National Institute of Aerospace, Virginia Polytechnic Institute & State University, USA);

http://www.dmin-2010.com/committees.htm

The list of Programme Committee of DMIN'10 appears at:

The DMIN'11 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.

and Prof. Lotfi A. Zadeh (Member, National Academy of Engineering; IEEE Fellow, ACM Fellow, AAAS Fellow, AAAI Fellow, IFSA Fellow; Director, BISC; Professor, University of California, Berkeley, USA).

Programme Committee members are expected to have established a strong and documented research track record. Those interested in joining the Programme Committee should email programme-chair@dmin--2011.com the following information for consideration/evaluation: Name, affiliation and position, complete mailing address, email address, a one-page biography that includes research expertise offering to help with.

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 2011 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.

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 ist 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.

NEWS

Thanks to authors and speakers of last WORLDCOMP congress and members of the editorial boards who informed us of the following good news: According to "Microsoft Academic Search" (a Microsoft initiative) all tracks of WORLDCOMP are listed as worldwide "Top-ranked Conferences" (based on various metrics but mainly based on the number of citations). You can access "Microsoft Academic Search" and specific information extracted from it (in reference to WORLDCOMP's individual conferences' names/acronyms and tracks) from the link below: http://www.worldacademyofscience.org/worldcomp10/ws/news

COMMITTEE/ORGANIZATION

Robert Stahlbock General Conference Chair conference-chair@dmin--2011.com Philippe Lenca, Gary M. Weiss Tutorial Chair, Special Session Chair

tutorial-chair@dmin--2011.com special-session-chair@dmin--2011.com

Nikolaos Kourentzes Programme Chair, Student Chair programme-chair@dmin--2011.com student-chair@dmin--2011.com Wolfram Lippe Exhibit Chair exhibits-chair@dmin--2011.com