



CALL FOR PAPERS

Extended Paper Submission Deadline: April 12, 2016

The 2016 (12th) International Conference on Data Mining (DMIN)

www.dmin-2016.com

as part of

The 2016 World Congress in Computer Science,
Computer Engineering, and Applied Computing

July 25-28, 2016, Monte Carlo Resort, Las Vegas, USA

WORLDCOMP'16

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

You are invited to submit a paper for consideration. All accepted papers will be published in printed conference books/proceedings (each with a unique international ISBN number) and will also be made available online. The proceedings will be indexed in science citation databases that track citation frequency/data. In addition, like prior years, extended versions of selected papers (about 40%) will appear in journals and edited research books; publishers include, Springer, Elsevier, BMC, and others). See the web link below for a small subset of such publications: (some of these books and journal special issues have already received the top 25% downloads in their respective fields and/or identified as "Highly Accessed" by publishers and/or science citation index trackers.)

http://www.worldacademyofscience.org/worldcomp15/ws/books_journals.html

The Congress is composed of a number of tracks (joint-conferences, tutorials, sessions, workshops, poster and panel discussions); all will be held simultaneously, same location and dates: July 25-28, 2016. The complete list of joint conferences can be found at <http://www.world-academy-of-science.org/>. DMIN is part of the Congress.

IMPORTANT DATES (with extended submission/notification dates):

- April 12, 2016: Submission of full papers (max 7 pages)
- April 23, 2016: Notification of acceptance (+/- two days)
- May 10, 2016: Final papers + Copyright + Registration
- July 25-28, 2016: The 2016 World Congress in Computer Science, Computer Engineering, and Applied Computing
(including DMIN and all the other affiliated federated conferences).

SCOPE: Submitted papers should be related to Data Mining, Data Science, Machine Learning and similar topics.

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

- **Data Mining/Machine Learning 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)
 - Mining "big data"
 - 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/big 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

- **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 Data Mining
 - Business/Corporate/Industrial Data Mining
 - Credit Scoring
 - Direct Marketing
 - Database Marketing
 - Engineering Mining
 - Military Data Mining
 - Security Data Mining
 - Social Science Mining
 - Data Mining in Logistics
 - Others

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 into consideration.

- **Data Mining Software**
 - All aspects and modules
- **Alternative and additional examples of possible topics include:**
 - Data Mining for Business Intelligence
 - Emerging technologies in data mining
 - Big Data
 - 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
 - Case studies and prototypes
 - 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 optimization
- 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, ...)

SUBMISSION OF PAPERS FOR EVALUATION:

Prospective authors are invited to submit their papers by uploading them to the DMIN evaluation web site via <http://www.dmin-2016.com/submission.htm>.

Submissions must be uploaded by the due date (see IMPORTANT DATES) and must be in pdf format (7 pages for Regular Research Papers; 4 pages for Short Research Papers; 2 pages for Extended Abstract/Poster Papers - the number of pages include all figures, tables, and references).

For typesetting etc. please have a look at <http://www.dmin-2016.com/submission.htm>. Later, the authors of accepted papers will be asked to upload their final paper on a different system organized by Worldcomp. Papers must not have been previously published or currently submitted for publication elsewhere.

The first page of the paper should include the followings:

- Title of the paper
- Name, affiliation, postal address, and email address of each author (identify the name of the Contact Author)
- Abstract (between 100 and 120 words)
- A maximum of 5 topical keywords that would best represent the work described in the paper
- While submitting, choose your paper type as "Regular Research Paper", "Short Research Paper", or "Extended Abstract/Poster Paper".
- The actual text of the paper can start from the first page (space permitting).

Type of Submissions/Papers:

- **Full/Regular Research Papers (maximum of 7 pages):**
Regular Research Papers should provide detail original research contributions. They must report new research results that represent a contribution to the field; sufficient details and support for the results and conclusions should also be provided. The work presented in regular papers are expected to be at a stage of maturity that with some additional work can be published as journal papers.
- **Short Research Papers (maximum of 4 pages):**
Short Research Papers report on ongoing research projects. They should provide overall research methodologies with some results. The work presented in short papers are expected to be at a stage of maturity that with some additional work can be published as regular papers.

- **Extended Abstract/Poster Papers (maximum of 2 pages):**

Poster papers report on ongoing research projects that are still in their infancy (i.e., at very early stages). Such papers tend to provide research methodologies without yet concrete results.

Special Sessions:

The following special sessions will be hosted by DMIN'16:

- 1) Real-World Data Mining & Data Science Applications, Challenges, and Perspectives
- 2) Data Science and Data Services
- 3) eMaintenance and Industrial Big Data

For details and specific CfPs, see the [link](http://dmin-2016.com/special_sessions.htm) http://dmin-2016.com/special_sessions.htm

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Authors are to conform to the common CODE OF ETHICS FOR AUTHORS (The document for the Code of Ethics is available on the submission web site.)

Each paper will be peer-reviewed by at least two experts in the field for originality, significance, clarity, impact, and soundness. In cases of contradictory recommendations, a member of the conference program committee would be charged to make the final decision (accept/reject); often, this would involve seeking help from additional referees. Papers whose authors include 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).

The proceedings will be published in printed conference books (ISBN) and will also be made available online. The printed proceedings/books will be available for distribution on site at the conference. The proceedings will be indexed in science citation databases that track citation frequency/data for each published paper. The proceedings/books of this congress have been evaluated and approved for inclusion into major science citation index databases. In addition, all proceedings are approved for inclusion into EBSCO (www.ebsco.com), one of the largest subject index systems. ACM Digital Library is also including the titles into its database

http://dl.acm.org/browse_by.cfm?by=title&pub=PUB4201&type=all&CFID=742684741&CFTOKEN=41356293

as well as ProQuest indexing database and others.

In addition to the above, Worldcomp has arranged two new book series (multiple books in each series); one with Elsevier publishers (Emerging Trends in Computer Science and Applied Computing) and another with Springer publishers (Transactions of Computational Science and Computational Intelligence).

After the conference (the process may take 12 to 18 months), a significant number of authors of accepted papers of our congress, will be given the opportunity to submit the extended version of their papers for publication consideration in these books. We anticipate having between 10 and 15 books a year in each of these book series projects. Each book in each series will be subject to Elsevier and Springer science indexing products (which includes: Scopus, www.info.scopus.com; SCI

Compendex, Engineering Village, www.ei.org; EMBASE, www.info.embase.com; and others). For a recent and a very small subset of the books (and journal special issues) that have been published based on the extended versions of many of the congress papers, see the link below:

http://www.worldacademyofscience.org/worldcomp15/ws/books_journals.html

PUBLICATION IN JOURNAL AND EDITED BOOK VOLUME

Selected high quality papers accepted and presented at the conference will be invited for an extended publication in the special issue of the International Journal of Service Science, Management, Engineering and Technology (indexed by JournalTOC, INSPEC, DBLP, Cabell's, Ulrich's, and others) and an edited book by Springer

TUTORIALS, INVITED TALKS

DMIN' 16 will host the following tutorials/invited talks

1) Peter Geczy

Invited Talk: Data Science: Where Academia Meets Commerce

2) Gary M. Weiss

Invited Talk: Mining Smartphone and Smartwatch Sensor Data: Activity Recognition, Biometrics, and Beyond

3) Diego Galar

Tutorial: Industrial Big Data: The door to prescriptive analytics

+ Planned: Ulf Johansson - Prediction with confidence

For details and specific CfPs, see the link <http://dmin-2016.com/tutorials.htm>

CO-SPONSORS:

Please have a look at the DMIN website and the WORLDCOMP website.

MEMBERS OF PROGRAM AND ORGANIZING COMMITTEES:

Please have a look at the DMIN website and the WORLDCOMP website.

The 2016 Program Committee for individual conferences are currently being compiled. Many who have already joined the committees are renowned leaders, scholars, researchers, scientists and practitioners of the highest ranks; many are directors of research labs., fellows of various societies, heads/ chairs of departments, program directors of research funding agencies, as well as deans and provosts.

Program Committee members are expected to have established a strong and documented research track record. Those interested in joining the Program Committee should email conference-chair@dmin-2016.com the following information for consideration: Name, affiliation and position, complete mailing address, email address, a one-page biography that includes research expertise & the name of the conference(s) offering to help with.

GENERAL INFORMATION:

The Congress will be composed of research presentations, keynote lectures, invited presentations, tutorials, panel discussions, and poster presentations. To get an overview on keynote/tutorial/panel speakers in recent past, please have a look at the Congress website.

The Congress is among the top five largest annual gathering of researchers in computer science, computer engineering and applied computing. We anticipate to have attendees from about 85 countries and territories. To get a feeling about the conferences' atmosphere, see some delegates photos available at:

2015 Congress: <http://worldcomp.phanfare.com/6981287>

2014 Congress: <http://worldcomp.phanfare.com/6626396>

Last 10 years: <http://worldcomp.phanfare.com/>

An important mission of The Congress 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 fields of

computer science, computer engineering, and applied computing. The Congress also encourages multi-disciplinary and inter-disciplinary research initiatives; i.e., facilitating increased opportunities for cross-fertilization across sub-disciplines.

MEASURABLE SCIENTIFIC IMPACT OF CONGRESS:

As of January 5, 2016, papers published in the conference proceedings that have been held as part of this congress, have received 28,380 citations (includes 3,346 self-citations). Citation data is obtained from Microsoft Academic Search. The citation data does not even include more than 17,000 other citations to papers in conferences whose first offerings were initiated by this congress (such as: FUSION, ICWS, ICMLA, and others).

MISCELLANEOUS:

The information that appears in this announcement is correct as of March 23, 2016.

CONTACT: Inquiries should be sent to: conference-chair@dmin-2016.com