4th International Conference WIMS’14
Web Intelligence, Mining and Semantics

Conference Web Site:  http://wims14.csd.auth.gr/
LinkedIn Group:  http://www.linkedin.com/groups?gid=3933343
Facebook Group:  https://www.facebook.com/groups/WIMSCon/
Twitter:  https://twitter.com/wims14

Call for Papers

Organizers

The 4th International Conference on Web Intelligence, Mining and Semantics (WIMS’14) is organized under the auspices of the Dept. of Informatics at the Aristotle University of Thessaloniki, Greece.

WIMS Conferences Chair
Rajendra Akerkar, Western Norway Research Institute, Norway

General Chairs
Ioannis Vlahavas, Aristotle University of Thessaloniki, Greece
Takahira Yamaguchi, Keio University, Japan

Program Committee Chairs
Nick Bassiliades, Aristotle University of Thessaloniki, Greece
Vadim Ermolayev, Zaporizhzhya National University, Ukraine

Advisory Committee
Grigoris Antoniou, University of Huddersfield, UK
Harold Boley, Faculty of Computer Science, University of New Brunswick, Fredericton, Canada
James Hendler, Rensselaer Polytechnic Institute, Troy, NY, USA
Guus Schreiber, VU University, Amsterdam, the Netherlands
Amit Sheth, Ohio Center for Excellence on Knowledge-enabled Computing, Ohio, USA

Workshops and Tutorials Chairs
Costin Badica, University of Craiova, Romania
Dimitris Vrakas, Aristotle University of Thessaloniki, Greece

Industrial Track Chair
John Davies, BT Research & Innovation, UK

Publicity Chair
Athena Vakali, Aristotle University of Thessaloniki, Greece

Local Organization Chair
Yannis Manolopoulos, Aristotle University of Thessaloniki, Greece

Web Chairs
Efstratios Kontopoulou, International Hellenic University, Greece
Fotis Kokkoras, T.E.I. of Thessaly, Greece

Conference Purpose and Scope

WIMS is a series of peer-reviewed International Computer Science conferences. It is a forum for researchers and practitioners to present their state-of-the-art results in building Intelligent Web, to examine performance characteristics of various approaches in Web-based intelligent information technology, and to cross-fertilize their ideas on the development of Web-based intelligent information management solutions across different domains.

The purpose of the WIMS series is:
- To provide a forum for established researchers and practitioners to present their contributions to the state of the art research and development in Web technology and applications
- To give doctoral students an opportunity to present their research to a friendly and knowledgeable audience and receive valuable feedback
- To provide an informal social event where Web technology researchers and practitioners can meet

WIMS traditionally hosts a small number of short tutorials on the topics related to the scope of the conference series. The role of a WIMS tutorial is to be a theme-oriented comprehensive survey. The call for WIMS’14 Tutorials is published separately.

WIMS also offers its infrastructure and facilities for the organizers of satellite workshops that complement the scope of the conference. The call for WIMS’14 Workshops is also published separately.

Companies or individuals interested in presenting their industrial products or methodologies are invited to contact the conference chairs.

Conference Scope

WIMS solicits regular and work-in-progress research, discussion papers and industry experience report papers in related fields. Papers exploring new directions or areas are also welcome. In particular but not exclusively the submissions within the following areas are relevant:

- Scalable Web and Data Architectures and Infrastructures
  - Crawling, caching and querying Linked (Semantic) Data
  - Dataset dynamics and synchronization
  - Big Data computing
  - User Interfaces and visualization for the Web of (Linked Semantic) Data at scale
  - Indexing and information extraction from the (Semantic) Deep Web
  - 3D media and content
  - Sensing Web and the Web of Things
  - Web-based Health- and Bio-Information Systems
  - Web security, integrity, privacy, and trust
  - Nature-inspired models and approaches in Web and data processing infrastructures
• Web Intelligence (WI)
  - Semantic Agent Systems for WI
  - Advanced Interaction and Communication Paradigms with WI
  - Natural Language / Ontology-/Taxonomy-based / Hybrid Interfaces
  - Intelligence for Visualizing (Linked Semantic) Web Data at scale
  - Intelligence for Big Data Analytics
  - Ubiquitous Intelligence and the Internet of Things
  - WI in Social Media
  - WI in Human Computation and Social Games
  - Opinion Mining / Sentiment Analysis on the Social Web
  - Social Monetization and Computational Advertising
  - Visualising social network data
  - WI for services, grids, and middleware
  - Nature-inspired Models and approaches for WI

• Web Mining, Information and Knowledge Extraction
  - Text, data stream, web and multimedia content mining
  - Contextualization and clustering in web mining and information extraction
  - Knowledge extraction and ontology learning from the Web
  - Linked Data mining
  - Information Extraction and Knowledge Discovery from Big Data
  - Mining and Information Extraction from the Deep Web
  - Semantic Deep Web data fusion

• Web Semantics and Reasoning
  - Knowledge Representation for the Web
  - Ontology specification: expressivity versus usability
  - Ontologies and Linked Semantic Data
  - Development and re-use of ontologies for the Web
  - Crowdsourcing for ontology engineering and management on the Social Web
  - Lifecycle, management, and evolution of Web ontologies
  - Ontology merging and alignment
  - Rule markup languages and systems
  - Semantic annotation
  - Reasoning: scalability, expressivity, incompleteness, vagueness, and/or uncertainty

• WIMS Applications
  - Web applications of semantic agent systems
  - Semantics-driven information retrieval
  - Semantic search
  - Intelligent e-Technology and the Semantic Web
  - Intelligence and semantics for business information management and integration
  - Intelligence and semantic technologies in Digital Media
  - WI for multimedia, sensors, and situational awareness
  - WI for software and systems engineering
  - Quality of Life Technology for Web Access
  - Nature-inspired models and approaches in WIMS applications

• Evaluation and Validation of WIMS Technologies and Applications
  - Evaluation and validation Methodologies
  - Datasets and Benchmarks for cross-evaluations and competitions
  - Evaluation and validation Infrastructures
  - Evaluation and validation metrics (e.g. fitness, quality, completeness, correctness, etc.)

---

Submission Guidelines

Five types of submissions are solicited for the main conference:

1. Regular research papers
2. Short research papers
3. Discussion, survey, or problem analysis papers
4. Posters

The papers in all the categories should describe original results that have not been accepted or submitted for publication elsewhere. All submissions will be evaluated by at least three members of the international program committee.

Regular Research Papers

The papers in this category are the reports on the accomplished research work. They present a novel method, technique or analysis with appropriate empirical or other type of evaluation as a proof of validity. The main evaluation criteria for this category are originality, technical soundness, and the soundness of evaluation.

Page limit: 12 ACM pages

Short Research Papers

The papers in this category are the short reports of the preliminary results or describing the work in progress. The main evaluation criteria for this category are originality, technical correctness, and possible value of the planned results in a short to mid-term perspective. Short papers can be also presented in a form of a poster.

Page limit: 6 ACM pages

Discussion, Survey, or Problem Analysis Papers

The papers solicited in this category will not present any novel method, technique or approach to solving a problem, but help understand the problem itself. Within the genre we expect receiving reasonable overviews placing a problem onto the state-of-the-art landscape and analyzing how far current solutions fall short. We also expect in-depth discussions and analysis of a certain problem, with clear definitions and argumentation in terms of qualitative or quantitative representation of the main characteristics of the problem.

Page limit: 12 ACM pages

Posters

WIMS poster track is a venue for late-breaking results, ongoing research activities, and speculative or innovative work in progress. This track is intended to provide authors and participants with the ability to connect with each other and to engage in discussions about the work. Posters provide authors with a unique opportunity to draw attention to their work during the conference.

Page limit: 4 ACM pages

Submissions should be made electronically in PDF or DOC/DOCX (MS/Office Word) format via the electronic submission system of the WIMS’14 Conference Management system at: https://www.easychair.org/conferences/?conf=wims14

Publication

Accepted papers/tutorials/posters will be published by ACM and disseminated through the ACM Digital Library through the International Conference Proceedings Series (ICPS). A selection of the best WIMS’14 papers will be invited to be revised and extended1 for the post-conference publication in the Special Issue of the International Journal on Artificial Intelligence Tools (IJAIT).

The proceedings of the previous WIMS conferences could be checked at:

- WIMS’11: https://dl.acm.org/citation.cfm?id=1988688
- WIMS’12: https://dl.acm.org/citation.cfm?id=2254129
- WIMS’13: https://dl.acm.org/citation.cfm?id=2479787

---

1 These papers will undergo the full review procedure.