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## **Editorial**

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The editorial board and I are proud to present this first issue of the *International Journal of Decision Support Systems* under the aegis of Inderscience Publisher.

The *International Journal of Decision Support Systems (IJDSS)* is a new scholarly journal that publishes applied and theoretical research contributing to DSS as a distinct scientific field where information systems, operations research and management science cooperate. The journal aims to establish an international state-of-the-art knowledge platform in the field of decision support systems (DSS) and thoroughly captures all underlying research developments. Acknowledging the singularities of modern global business environment, this research vehicle seeks to significantly improve current DSS technologies and decision information frameworks, by publishing only novel and high quality theoretical or empirical contributions. *IJDSS* finally shapes its content by the research drift and motivation of people involved both in academia and industry.

The topics covered by the *IJDSS* include, but are not limited to the following:

- artificial intelligence and DSS
- business analytics and business intelligence systems
- cognitive sciences
- collaborative decision-making
- computational intelligence and evolutionary computation
- data warehousing and online analytical processing systems
- decision-making in multi-agent systems
- decision-making under risk and uncertainty
- decision theory and engineering
- DSS foundations and development
- decision support in cyber-physical systems
- distributed decision-making
- electronic business

- executive support systems and workflow management systems
- game theory
- multi-criteria DSS
- operational research and management science
- optimisation
- organisational DSS
- social choice models
- spatial DSS
- system dynamics and decision-making
- visualisation and decision-making
- web-based and mobile DSS
- relevant DSS applications in areas other than those mentioned above such as: agriculture, business, education, environmental and energy management, financial engineering, health, human resources management, innovation, investments, logistics and supply chains management, marketing and marketing management, military operations, operations and production management, public and private sector, production, science, engineering and technology, social media, telecommunications, tourism, transportation, etc.

After all *IJDSS* will:

- raise the awareness of importance regarding the gravity of the DSS research field
- focus on the excellence in developing DSS methodologies, models and techniques to deal with major decision-making problems
- provide insights relatively to the latest DSS developments
- offer a networking forum for academic researchers and industry practitioners.

The *IJDSS* accept original research papers, research notes and review papers in the field of DSS.

*IJDSS* publishes high quality empirical, theoretical and survey research pieces that contribute significantly and provide meaningful insights in the field of DSS. Priority is given to articles that reveal novel concepts of broad interest to the research community. Contributions may be by submission or invitation. Suggestions for special issues that address specific and well-defined relevant topics are welcome.

*IJDSS* hosts all the basic methodological streams of DSS. We focus on papers presenting new theoretical insights and developments, as well as real-world case studies illustrating the implementation of DSS approaches in everyday business practice. Papers exploring the interactions of DSS with other relevant disciplines are of particular interest. Research papers from eminent scientists reviewing the existing state-of-the-art are also welcome.

*IJDSS* is committed to publish only top-quality original research pieces and for this reason a very strict review process is adopted.

The editorial board of *IJDSS* invites scholars to submit original research papers, research notes and review papers in the field of DSS, following the journal's guidelines ([http://www.inderscience.com/info/inauthors/author\\_submit.php](http://www.inderscience.com/info/inauthors/author_submit.php)).

Papers of exceptional interest may be immediately reviewed and accepted for publication by the Editor-in-Chief.

Also, we would like to invite you to submit your proposals for:

- Editing special issues in the topics covered by *IJDSS*.
- Editing special issues in the topics covered by *IJDSS* in the context of conferences and workshops you are organising.

The first issue of *IJDSS* comprises of six papers.

In the first paper, M. Amarnath, D. Jain, V. Sugumaran, and H. Kumar present the use of naïve Bayes and Bayesian network algorithms, for fault diagnosis through statistical features extracted from the vibration signals of good and faulty components of helical gear boxes.

The second paper is of methodological nature. E. Krassadaki and N.F. Matsatsinis present a multi-criteria and statistical framework for measuring and analysing customers' experience.

The third paper by C. Diakaki, N. Panagiotidou, A. Pouliezos, G.D. Kontes, G.S. Stavrakakis, K. Belibassakis, T.P. Gerostathis, G. Livanos, D.-N. Pagonis, and G. Theotokatos present a MATLAB-based DSS for the development of voyage and maintenance plans for ships.

In the fourth paper, N. Rezoug, O. Boussaid, and F. Nader propose a knowledge-based framework for a mobile OLAP, where the main goal is to allow decision makers to efficiently access data sets in OLAP system, anywhere and anytime.

In the next paper, R.K. Sharma, V. Sugumaran, H. Kumar, and M. Amarnath use sound signal for condition monitoring of roller bearing by naïve Bayes and Bayesian network algorithms.

In the final paper of this issue, A. Kundu and S.K. Ghosh models the network hardening measure selection problem as a multi-objective optimisation problem with three objectives – minimising hardening cost, minimising security risk, and maximise overall network accessibility.

I would like to thank our editorial board for their work so far in helping to develop and promote *IJDSS*. Special thanks should also be given to all the authors whose contributions have been essential in publishing this first issue. We also owe a great debt to those who worked long and hard to review all the submitted papers and contributed to complete our first issue. Finally, I would like to extend my sincere thanks to the supporting publishing team in Inderscience, and particularly to Jim Corlett, Daren Simpson, Joane Esmejarda, Sue O'Mara, Rebecca Leivers, and Ian Moore.

As Editor-in-Chief, I welcome all your comments and suggestions.