Editorial

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Biographical notes: Sheryl Brahnam is an Associate Professor in the Computer Information Systems Department at Missouri State University. She is Lead Scientist of the Infant Classification of Pain Expressions (COPE) project. Her interests are in artificial intelligence, machine vision, AI art, and social, cultural, and educational aspects of technology.

Lakhmi C. Jain is a Director/Founder of the Knowledge-Based Intelligent Engineering Systems (KES) Centre, located in the University of South Australia. He is a fellow of Engineers Australia. His interests focus on the artificial intelligence paradigms and their applications in complex systems, art-science fusion, e-education, e-healthcare, unmanned air vehicles and intelligent agents.

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We live in a knowledge-based society. The Web is an integral part of our society. It is difficult to imagine our life without the Web. The Web has become a ubiquitous tool for finding and sharing information and for conducting business, learning, and entertainment.

The main aim of the *International Journal of Knowledge and Web Intelligence* (IJKWI) is to publish innovative world class research on the techniques, systems, methods and applications that help the World Wide Web transform from a static data and information repository to an interactive, dynamic, transparent, and secure knowledge and service network. *IJKWI* is committed to deepening the understanding of enabling technologies for applying and for developing the Web as a global information repository, as well as the understanding of the computational, cognitive and social foundations of the web.

IJKWI also will publish review papers, technical reports, survey papers, case studies, conference reports, book reviews, notes, and commentaries relevant to our aim. Special issues devoted to important topics in knowledge and web intelligence will also be published.

The inaugural issue includes seven papers in the fields of web mining and semantic models. The first paper by Vassiliki A. Koutsonikola and Athena Vakali presents a three-step bi-clustering approach which identifies groups of related web users and pages based on the principles of spectral clustering analysis. The second paper in this issue by Marios Poulos, Sozon Papavlasopoulos, V.S. Belesiotis and Nikolaos Korfiatis presents a method of web page-ranking, based on computational geometry, to evaluate and to test by examples, and to order relationships among web pages that belong to different knowledge domains. The third paper by F. Khalil, J. Liu and H. Wang presents an integrated model for the next web page prediction. This paper provides an improved prediction accuracy and state space complexity by proposing an integrated model that combines clustering, association rules, and Markov models. The fourth paper by Bhaskar Biswas, Karan Jain, Vipul Mittal and K.K. Shukla presents an approach to building the universal web wrapper based on the clustering of web pages based on their structures. The fifth paper by Cheng Wang, Ying Liu, Liheng Jian and Peng Zhang presents the concept of web content sensitivity in order to provide a quantitative measure of the sensitivity of a web page and an approach for mining web content sensitivity. The sixth paper by Felix Mödritscher presents a lifecycle model for semantics, consisting of five important phases: modelling, application, authoring, mining, and evaluation of semantic information.

The model and its phases enable a holistic view on meaningful information necessary for systemic intelligence. This model also allows categorising problematic aspects of semantic technologies. In addition, it supports the evaluation of their usability, utility, and necessity. The last paper by Sikha Bagui presents a means of effectively mapping the ontology language OWL data to relational databases in order to be able to easily manipulate and integrate OWL data.

Together let us celebrate the inaugural issue of IJKWI and wish for its success.