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(QUARTERLY)

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Editorial

Introduction of the Inaugural Issue of the *Journal of Data and Information Science*

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On behalf of the editorial board of the *Journal of Data and Information Science* (*JDIS*) and of its parent organization the Chinese Academy of Sciences (CAS) we are delighted to announce the first issue of the *JDIS*.

The traditional approach of performing research, namely, reading, formulating hypotheses, and testing, is rapidly evolving and changing in a world in which several millions of articles are published each year. Scientists are nowadays confronted with large numbers of relationships between more and more diverse actors. No person can read the complete literature of their own field. Although this may be considered a threat to science, it may also be considered a unique opportunity to change the way science is carried out. The massive amount of accumulated publications produced over the years probably contains a treasure of minable information. Hence for many young scientists applying theories, methodologies, techniques, and services to support knowledge discovery has become a key competency. "Big data" is not just a buzz-word but a daily concern. It is no surprise to see that the science to develop, test, improve, and apply new methods and facilities has become a fast developing and far-reaching endeavor. This new science integrates research and practice from data mining, knowledge discovery, knowledge infrastructure, predictive analytics, competitive intelligence, informetrics, (semantic) webmetrics, social network analysis, altmetrics, information science, evidence-based policy making, domain informatics, intelligent knowledge production, etc., into a new and coherent knowledge-based discipline.

A major component of this discipline is known as data analytics, the multidimensional approach of examining raw data with the purpose of discovering meaningful patterns, analyzing and communicating the obtained information to specific target groups. Data analytics relies on the simultaneous application of mathematics, statistics, computer programming, and operations research. It makes use of techniques for explanatory research, seeks to identify underlying factors, and performs conceptual modeling, often leading to data visualization to communicate insights. As a consequence we hope that this journal will play an important role in the scholarly development and communication of these new techniques. Yet, the

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Editorial

journal, off-spring of the *Chinese Journal of Library and Information Science*, does not want to denounce its antecedents. There will also be a place in its pages for information science as we know it today.

It is important now to reshape scientific practice by imposing stringent research publishing protocols leading to strict accountability, precision, and verifiability of data and algorithms. This must allow readers to assess the reliability and validity of the work that has been published. The journal *JDIS* is open to the publication of negative scientific results so that others learn the lessons of the past rather than repeat failures or misunderstandings. More generally, we hope that the journal can contribute to a spirit of collaboration over geographical, cultural, and disciplinary borders.

In accordance with the latest developments in journal publishing this journal is an Open Access journal and intends to stay this way.

Let's think big and welcome the new opportunities, some would say the paradigm shift, in the field of information science to embrace the new role that data and data science are playing.

The JDIS Editors

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SUBMISSION GUIDELINES

AIMS & SCOPE

JDIS devotes itself to the study and application of the theories, methods, techniques, services, infrastructural facilities using big data to support knowledge discovery for decision & policy making. The basic emphasis is big data-based, analytics centered, knowledge discovery driven, and decision making supporting. The special effort is on the knowledge discovery to detect and predict structures, trends, behaviors, relations, evolutions and disruptions in research, innovation, business, politics, security, media and communications, and social development, where the big data may include metadata or full content data, text or non-textural data, structured or non-structured data, domain specific or cross-domain data, dynamic or interactive data.

REFEREEING PROCESS

Articles covering the topics or themes mentioned above will be refereed through a double-blind peer review process.

MANUSCRIPTS CATEGORIES

Research Articles represent original research work or a comprehensive and in-depth analysis of a topic. More than 3,000 words are considered as a proper length for such manuscripts, with a structured abstract ca. 200 words.

Application Articles cover the latest development and application in any segment of data analysis and information science field work. The length of the manuscript is preferred to be more than 3,000 words, with a structured abstract ca 200 words.

Review Articles summarize the status of knowledge and outline future directions of research within the scope of the journal.

Perspectives are forward-looking viewpoints that advocate important future directions in the theory or application of data and information science.

MANUSCRIPTS REQUIREMENTS

All papers are submitted in English with a double-line space. For the assurance that all the materials of the to-be submitted are included, please check the following:

Title page. The title, author list, affiliations, and author contribution statement should all be included on a title page as the first page of the manuscript file.

Structured abstract & Keywords. A structured abstract is required for all research papers in order for readers to acquire the key points of a manuscript.

References. Be sure all the references used should be cited properly in both in text and in bibliography. For the detailed information, please request a copy of Reference Citation Format.

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A guide for authors and other relevant information, including submitting papers online, is available at http//www.jdis.org. For any questions, you can e-mail the Office at jdis@mail.las.ac.cn.

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