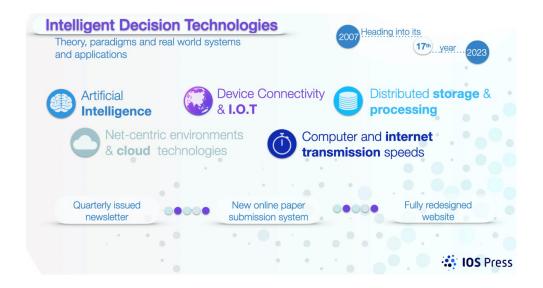## Editorial

Intelligent Decision Technologies: An International Journal (IDT) heading into its 17th year: A Short Note from the Editors

George A. Tsihrintzis, Gloria Phillips-Wren, Lakhmi C. Jain and Junzo Watada

1. Scope and History of the Intelligent Decision Technologies Journal

Intelligent Decision Technologies (IDT): An International Journal (https://www.iospress.com/catalog/journals/intelligent-decision-technologies) is dedicated to the advancement and dissemination of research results and knowledge in the theory and application of intelligent technologies and systems in support of decision making. The IDT Journal is affiliated with KES International (http://www.kesinternational.org/), "a professional community, with networking, research and publication opportunities for all those who work in knowledge-intensive subjects" KES sponsors international conferences on leading-edge topics, including an annual conference for Intelligent Decision Technologies.

The idea of the IDT Journal originated through discussions between Professor/Dr. Gloria Phillips-Wren and Professor/Dr. Lakhmi C. Jain at the Knowledge Engineering Systems (KES) International annual conferences in the timeframe of 2004–2006. The spark that at the time inspired the two Professors to initiate the IDT Journal lay in the fact that, while research mainly focused on algorithms and technical

specifications, the technology was also becoming mature enough to be implemented into real-world decision support systems (DSS) for previously intractable problems.

Thus, the IDT Journal was launched in 2007. Profs./Drs. Lakhmi C. Jain and Gloria Phillips-Wren introduced the IDT Journal to the research community with an editorial note stating that "*The purpose of this peer reviewed, scholarly journal is to develop a forum for theoretical and applied research that combines artificial intelligence based in computer science, decision support based in information technology, and systems development based in engineering science. Interdisciplinary advances in these fields have the potential to significantly improve individual and organizational decision making. The growth of the internet with its concomitant availability of data has exploded the amount and types of information that must be considered by a decision maker. Decisions must often be made in real-time under uncertain, stressful conditions that may change rapidly. Synergies between intelligent and information technologies can, for example, deliver artificial intelligence to enhance human judgment, perceive anomalies in data, enable collaboration, speed processing of new information, assist in risk assessment, identify and retrieve needed knowledge, suggest alternatives to the decision maker, and automate some decisional tasks. We look forward to the dialogue within this community and welcome your research for publication*" [1].

Since its launch, the IDT Journal is in continuous circulation with a new issue published quarterly by IOS Press (https://www.iospress.com/) headquartered in Amsterdam, the Netherlands. At the same time, the field of intelligent decision support has been enjoying continuous and rapid expansion in theory, paradigms and real-world systems and applications. This expansion is due to parallel advances and efficiencies in such enabling technologies as (1) Artificial Intelligence (AI); (2) connectivity between devices such as the Internet of Things (IoT); (3) data storage, processing and transmission in distributed, virtualized and network-centric environments (e.g. cloud technologies); (4) remarkable computer and internet transmission speeds; and (5) distributed storage and processing of large datasets across clusters of processors and computers. Since many applications involve some type of decision, IDT has expanded its scope and areas of interest and it has grown into an internationally recognizable and impactful forum for original research that has the potential to improve decision making using intelligent technologies [2,3].

2. Editors-in-Chief

In the past sixteen years, the following persons have undertaken roles as editors-in-chief of the IDT Journal:

- 2007 Founded by Gloria Phillips-Wren and Lakhmi C. Jain
- Honorary editor: Robert J. Howlett, Executive Chair of KES
- 2010 Gloria Phillips-Wren, Lakhmi C. Jain, Junzo Watada
- 2016 CP Lim (managing editor), Gloria Phillips-Wren, Lakhmi C. Jain, Junzo Watada
- 2018 George A. Tsihrintzis (managing editor), Gloria Phillips-Wren (special issue editor), Lakhmi C. Jain, Junzo Watada

Gloria Phillips-Wren, PhD, MS, MBA, MEd, BA (summa cum laude) is Professor and past Chair of the Department of Information Systems, Law and Operations Management at Loyola University Maryland, USA. She is founder and co-editor-in-chief of Intelligent Decision Technologies (IDT) and Associate Editor of the Journal of Decision Systems (JDS). She is past chair of the Special Interest Group on Decision Support and Analytics (SIGDSA) under the Association of Information Systems (AIS), a Board member for SIGDSA, an External Examiner for University College Cork in Ireland, Secretary of IFIP WG8.3 Decision Support (DS), and Associate Chair for Knowledge Engineering Systems (KES) International in intelligent decision technologies. She received an award for Outstanding Contribution to KES, one of two selected annually. Her research interests and publications are in decision making and support, data

analytics, business intelligence, healthcare technologies the value of data, and strategic uses of technologies such as social media. Most recently she has been investigating the role of stress and bias in decision making along with the concomitant development of supporting intelligent technologies.

Contact Information: Sellinger School of Business and Management, Department of Information Systems, Law and Operations Management, Loyola University Maryland, 4501 N. Charles Street, Baltimore, MD, USA, email: gwren@loyola.edu.

Lakhmi C. Jain, PhD, ME, BE(Hons), Fellow (Engineers Australia) is with the Liverpool Hope University, UK and the University of Arad, Romania. He was formerly with the University of Technology Sydney, the University of Canberra and Bournemouth University. Professor Jain founded KES International (http://www.kesinternational.org/organisation.php) to provide the professional community with opportunities for publications, knowledge exchange, cooperation and teaming. Involving around 5,000 researchers drawn from universities and companies world-wide, KES facilitates international cooperation and generates synergy in teaching and research. KES regularly provides networking opportunities for the professional community through one of the largest conferences of its kind in the area of knowledge engineering systems. Prof. Jain's interests focus on artificial intelligence paradigms and their applications in complex systems, security, e-education, e-healthcare and unmanned air vehicles.

Contact information: KES International, Selby, United Kingdom, email: jainlakhmi@gmail.com; jainlc2002@yahoo.co.uk

Junzo Watada, PhD, Msci, Bsci is an IEEE Life Senior Member, a Life Fellow of the Japan Society for Fuzzy Theory and Intelligent Informatics, Japan, and a Life Fellow of the Bio-Medical Fuzzy System Association, Japan. He has been involved in KES, and especially IDT, for about 30 years. He is a gold member of KES and has received several awards by KES in the past. He also received the Henri Coanda Medal Award from Inventico, Romania, in 2002, and the GH Asachi Medal from the Universitatea Tehnica GH Asachi, IASI, Romania, in 2006. His research interests include big data analytics, soft computing, image processing systems to track human behaviors and understand pictures and videos, knowledge engineering, management engineering, and finance engineering

Contact information: junzo.watada@gmail.com
http://www.f.waseda.jp/watada/; http://wwwwcicmecom/watada/

Chee Peng Lim received his Ph.D. degree from the Department of Automatic Control and Systems Engineering, the University of Sheffield, UK, in 1997. He has published over 450 technical papers in journals, conference proceedings, and books, edited four books and 15 special issues in journals. Recipient of seven best paper awards in international conferences, his research focuses on the design and development of computational intelligence-based systems for pattern classification, decision support, and optimization with application to medical prognosis and diagnosis, fault detection and classification, as well as manufacturing process optimization. He was Co-Editor-in-Chief of Intelligent Decision Technologies.

Contact information: Institute of Intelligent Systems Research and Innovation Deakin University, Australia, email: chee.lim@deakin.edu.au

George A. Tsihrintzis, received the Diploma of Electrical Engineering from the National Technical University of Athens, Greece (with honors) and the M.Sc. and Ph.D. degrees in Electrical and Computer Engineering from Northeastern University, Boston, Massachusetts, USA. He is currently a Professor in The University of Piraeus, Greece and, during 2016–2020, he served as Head of its Department of Informatics. From 2008 to 2022, he served as the Director of the Graduate Program of Study in "Advanced Computing and Informatics Systems" of the Department. During the period 2016–2020, he was a Member of the first Administration Council of the University of Piraeus. Currently, he is serving again as a Member of the Administration Council of the University of Piraeus for a four-year term (2022–2026). His current research interests include Artificial and Computational Intelligence, Machine Learning,

Pattern Recognition, Decision Theory, and Statistical Signal Processing and their applications in Internet-of-Things Technologies, Multimedia Interactive Services, User Modeling, Knowledge-based Software Systems, Human-Computer Interaction and Information Retrieval. He has authored or co-authored over 350 research publications in these areas, which have appeared in international journals, book chapters, and conference proceedings. He has served as the principal investigator or co-investigator in several R&D projects. Since 2018, he is editor-in-chief of the Intelligent Decision Technologies Journal (IOS Press). During 2011–2022, he was the editor-in-chief of the International Journal of Computational Intelligence Studies (Inderscience). He has been the editor-in-chief of Engineering Section of SpringerPlus. He is the founder and editor-in-chief of the *Learning and Analytics in Intelligent Systems* book series (Springer 2019-) and the *Artificial Intelligence-Enhanced Software and Systems Engineering* book series (Springer 2022-). He has organized and chaired 38 international conferences. He has received best paper awards from several international conferences and he has been a keynote speaker of several international conferences.

Contact information: Department of Informatics, University of Piraeus, Piraeus 185 34, Greece, email: gatsihrintzis@gmail.com, geoatsi@unipi.gr

3. New Person on the Editorial Team

As of January 1, 2023 and because of the tremendously increasing numbers of new submissions (see graph in Section 5), a new position is put into effect, namely the position of **Assistant to the Editors**. In his/her capacity, the Assistant to the Editors will be responsible for a preliminary screening of new submissions, including (i) checking for high similarity and resemblance to current or previous submissions, (ii) making a preliminary evaluation of their relevance to the IDT Journal scope, (iii) evaluating the quality of the use of English in them, and (iv) proposing potential reviewers to the chief editors after making an appropriate search.

Dimitrios P. Panagoulias has undertaken the role of Assistant to the Editors. Dimitrios holds a Bachelor's Degree in Business Administration from Athens University of Economics and Business, Greece, as well as a M.B.A and a M.Sc. in Computer Science from the University of Piraeus, Greece. He is currently a Ph.D. candidate in the Department of Informatics of the University of Piraeus, expecting to complete and defend his doctoral thesis later this year. His research interests falls within the domain of Machine Learning and Intelligent Software Technologies for biomedical and energy applications. Since 2011, he has been at the helm of Dermacen S.A., a tertiary health care provider in Greece in the medical specialties of Dermatology, Venereology and Plastic Surgery. In 2018, he founded Disk Inside I.T. Development and Consulting Ltd. in the U.K., a company which focuses on developing C.R.M. and E.R.P. software (mainly for the medical sector) and providing consultation related to digital transformation and branding. His research focuses on Machine Learning and Pattern Recognition, development of A.I.-infused systems and APIs using iterative or agile development methodologies, and functional and object oriented programming with .Net, Python and Javascript.

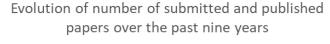We warmly welcome Dimitrios onboard and wish him the very best in his new role!
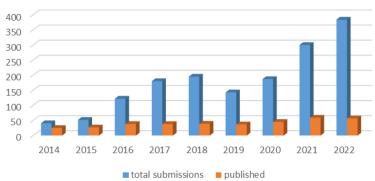
4. Journal Indexing

Currently, the IDT Journal has been recognized by the Web of Science as an Emerging Sources Citation Index and is indexed, among others, in
- ACM Digital Library
- Cabell's Guide or Directory

- Compendex
- DBLP Bibliography Server
- EBSCO databases
- Google Scholar
- Inspec IET
- Microsoft Academic Search
- Scopus
- Ulrich's Periodicals Directory
- Web of Science: Emerging Sources Citation Index

5. Evolution of the numbers of submitted and published papers

Evolution of number of submitted and published papers over the past nine years

Some points that stand out in these graphs are the following:

- Over the years, there is a continuous and rapid increase in the number of submitted papers, which is a clear indication of the recognition the IDT journal has been gaining. On the other hand, the number of published papers has risen at a much slower rate. The combination of these two facts implies that the IDT journal maintains a low acceptance rate (currently below 20%) which is the result of rigorous review and ensures that only highest quality papers will be published in it.
- In 2021, the IDT Journal reached a milestone of 300 submissions, as well as a record number of 59 published papers. The published papers appeared in two special issues and two regular issues. The editorial notes to the special issues are freely available via the Journal website, as also are three of the published papers. Additionally, five book reviews were also published in 2021 and are also freely available via the Journal website.
- In 2022, the 2021 milestone in papers submissions was surpassed. The IDT Journal received a new record of 384 submissions and published 57 high quality papers. The papers appeared in one special issue on the COVID-19 pandemic and three regular issues. All papers addressing aspects of the COVID-19 pandemic, either included in the special issue or included in the regular issues, are freely availbe via the Journal site. Additionally, two book reviews were also published in 2021 and are also freely available via the Journal website.
- Other recent changes that were effected in early 2022 and are available to IDT journal authors and readers, include:

* a fully-redesigned website
  (https://www.iospress.com/catalog/journals/intelligent-decision-technologies),
* replacement of the previous online system for paper submission and handling with the user-focused and more functional *Editorial Manager*
  (https://www.editorialmanager.com/idt/default2.aspx), and
* a newsletter issued quarterly and sent to proper mailing lists to alert the research community of publication of the most recent issue of the IDT Journal, announce open special issues of the Journal and publicize other relevant information. To sign up to receive the newsletter in your email, go to: tiny.cc/IDTsignup.

In 2023, the IDT Journal enters its seventeenth year. The current issue, i.e. issue 17(1), includes the following:

1. Four papers, as part of a **Special Issue on "Intelligent Healthcare and Biometric Applications using Deep Learning"**. This special issue was guest-edited by:

   – Steven L. Fernandes, Ph.D.
     Assistant Professor of Computer Science
     Creighton University, USA
     stevenfernandes@creighton.edu
   – Yu-Dong Zhang, Ph.D.
     Professor and Chair in Knowledge Discovery and Machine Learning
     University of Leicester, UK
     yudong.zhang@le.ac.uk
   – Hong Lin, Ph.D.
     Professor of Computer Science and Engineering Technology
     University of Houston Downtown, USA
     linh@uhd.edu
   – João Manuel R. S. Tavares, Ph.D.
     Associate Professor of Faculty of Engineering
     University of Porto, Portugal
     tavares@fe.up.pt
   – J. Dinesh Peter, Ph.D.
     Associate Professor of Computer Science and Engineering
     Karunya Institute of Technology and Sciences, India.
     dineshpeter@karunya.edu

   It consists of a total of seven papers, but its first three papers appeared in IDT issues 16(1) and 16(2) so as to get a quick publication.

2. Eight papers selected for inclusion in a **Special Collection of Invited Original Research Papers on "Contributions by Women in Theory and Applications of Artificial Intelligence"**. This collection was guest-edited by

   – Maria Virvou, Ph.D.
     Professor and Chair of the Department of Informatics
     University of Piraeus, Greece
     (maria.virvou@gmail.com)
   – George A. Tsihrintzis, Ph.D.
     Professor and Member of the Board of Governors
     University of Piraeus, Greece
     (gatsihrintzis@gmail.com)

  – Gloria Phillips-Wren, Ph.D.
    Professor and past Chair of the Department of Information Systems, Law and Operations Management
    Loyola University Maryland, USA
    (gwren@loyola.edu)
  – Lakhmi C. Jain, Ph.D.
    Professor and KES International Founder
    KES International, Shoreham-by-Sea, UK
    (jainlakhmi@gmail.com)

3. The current issue also includes a review by Prof. (Associate)/Dr. Miltiadis (Miltos) Alamaniotis, University of Texas-San Antonio, USA of a two-volume Handbook on "Artificial Intelligence-Empowered Applied Software Engineering".

Special thanks are due to Reina Steenhuizen, Steffen de Jong, Britt Moss, all the editorial assistants, the financial department and the head of the journal department for the great work they have been doing in getting the IDT journal published at the highest possible quality.

It is the hope of the editors of the IDT Journal that its readers will not only enjoy the current issue, but they will also find it useful, helpful and inspiring in their own endeavors and will consider the IDT Journal as the proper forum for publication of their research work. We welcome your original research paper submission and remain open to reader suggestions that may improve the Intelligent Decision Technologies Journal further.

References

[1] Jain LC, Phillips-Wren G. *Editorial Note to Inaugural Issue of the IDT Journal*, freely available at https://content.iospress.com/articles/intelligent-decision-technologies/idt00001.

[2] Phillips-Wren G, Tsihrintzis GA, Jain LC, Watada J. *15 years of the International Journal of Intelligent Decision Technologies (IDT): Reflection from the Editors*, freely available at https://content.iospress.com/articles/intelligent-decision-technologies/idt219001.

[3] Tsihrintzis GA, Phillips-Wren G, Jain LC, Watada J. Intelligent Decision Technologies: An International Journal (IDT) enters its 16th year: A short note from the editors, freely available at https://content.iospress.com/articles/intelligent-decision-technologies/idt210997.