

## EDITORIAL

The IADIS International Journal on Computer Science and Information Systems (IJCSIS) is a peer-reviewed scientific journal published exclusively in an electronic form. Its mission is to publish original contributions pertaining to the topics of Applied Computer Science, Information Systems and their Applications, to disseminate knowledge amongst its readers and to be a reference publication. The IADIS IJCSIS publishes original research papers and review papers, as well as auxiliary material such as: short ongoing research papers, case studies, conference reports, management reports, book reviews and commentaries.

This volume (ISSN: 1646-3692) combines 11 selected original papers that bring together researchers covering the wide spectrum of Computer Science and Information Systems and their applications. The authors' contributions embrace important research topics and intend to provide a current depiction of the research in the field while opening way to future research work.

The first paper in this issue by Ghazi Ben Ayed (University of Lausanne, Switzerland), entitled *CONSOLIDATING FRAGMENTED IDENTITY: ATTRIBUTES AGGREGATION TO SECURE INFORMATION SYSTEMS*, compares three identity aggregation models: virtual-centralization, meta-centralization and identity federation. It identifies silos consolidation as being fundamental to secure information systems. Additionally, it presents a framework to assist organisations to carry out implementation projects of attributes aggregation.

The second paper by Cliona McParland and Regina Connolly (Dublin City University, Ireland), entitled *TECHNOLOGY-RELATED PRIVACY CONCERNS: A REVIEW*, offers a review of the existing literature on technology-related privacy concerns. In spite of the increasing importance of privacy matters, originated by growing interaction and transactions on the web, research on this topic is still scarce. The authors aim to reduce a certain confusion around the subject by providing a deeper understanding, while opening way for prospective research.

The third contribution by ChenHan Liao, Frank Wang, Sining Wu, YuHui Deng (Cranfield University, UK) and Na Helian (University of Hertfordshire, UK), entitled *FAST FLASH MEMORY CACHING BASED ON FILE ACCESS FREQUENCY*, advocates that when a file is created with a set of characteristics, for instance, type, name or permission mode its future use can be anticipated. The authors use a predictive model based on a decision-tree that will be able to assess if a file will be used regularly or not. By conferring the rules created by this predictive model over various real-system NFS traces, this model will be able to foresee with enough precision a file's frequency of access. They also propose a storage method that by using the prediction information will determine what files should be kept in flash memory.

The fourth paper by Michael Kamel, Khaled Nagi and Nagwa El-makky, (Alexandria University, Egypt) titled *ADAPTIVE STORAGE MODEL FOR XML IN OBJECT-RELATIONAL DATABASES* introduces the *Selective XML Shredding storage scheme for XML* in Object Relational Database Management Systems (ORDBMS). CLOB is used to store XML inside the relation, in the majority of ORDBMS. The authors' novel approach based on an adaptive method for selective shredding is compared with the COB and the complete shredding techniques and intends to address their shortcomings. It is a hybrid technique that combines both the CLOB and the complete shredding approaches.

The fifth paper by Sebastian Schinzel (Darmstadt University of Applied Sciences, Germany), Martin Schmucker and Peter Ebinger (Fraunhofer Institute for Computer Graphics Research IGD, Germany), *SECURITY MECHANISMS OF A LEGAL PEER-TO-PEER FILE SHARING SYSTEM*, shows the iterative progress of CONFUO©O's security in comparison with traditional Rights Management systems (DRMS) DRM systems. CONFUO©O is a legal application of peer-to-peer file sharing, which focuses on content distribution rather than usage. The authors explore possible threats and weaknesses of the use of this protocol and identify a potential Denial-of-Service (DoS) menace. They suggest improvements to the service in order to move forward in the fair practice of multimedia data usage and in the dissemination the use of DRM free media.

The sixth contribution, by Andrea Addis, Eloisa Vargiu, Giuliano Armano (University of Cagliari, Italy), Manuela Angioni, Roberto Demontis and Franco Tuveri (CRS4, Center of Advanced Studies, Research and Development in Sardinia, Italy) entitled *A NOVEL SEMANTIC APPROACH TO DOCUMENT COLLECTIONS* presents a semantic text classification approach capable of automatically generating document collections, which classifies documents according to WordNet Domains taxonomy. Usually, collections of documents are categorised by domain engineers. The authors' empirical research compares the classification performances of the automatic categorisation method and the domain engineers.

The seventh article by Jan Bender, Daniel Bayer and Raphael Diziol (Institut für Betriebs- und Dialogssysteme, Germany), titled *DYNAMIC SIMULATION OF INEXTENSIBLE CLOTH* proposes an impulse-based technique for cloth simulation. The simulation of cloth has many applications such as virtual reality or computer games. Since cloth is assumed to be an elastic material the simulation can happen resorting to spring forces, the problem is the minor stretching capacity of many textiles. The impulse-based approach the authors outline tries to address this challenge and permit a realistic simulation of inextensible textiles, that otherwise simulated with spring forces would cause rigid differential equations and negatively impact the quality of the performance.

The eight paper by Kevin Glass and Shaun Bangay (Rhodes University, South Africa), *A METHOD FOR AUTOMATICALLY CREATING 3D ANIMATED SCENES FROM ANNOTATED FICTION TEXT* suggests a method for the automatic conversion of fiction text into 3D animations. The authors employ a knowledge-poor strategy which allows for human involvement in the process of conversion. Other researches concentrate their attention on allowing conversion processes to be entirely automatic and knowledge-centric. With the proposed method the process reaches a considerable degree of automation, but creates the possibility for human creativity intervention in animation.

The ninth contribution by Luis M. De Campos, Juan M. Fernández-luna, Juan F. Huete and Carlos J. Martín-Dancausa (Universidad de Granada, Spain) *SYNCHRONISING VIDEO SESSION RECORDINGS AND TEXTUAL TRANSCRIPTIONS FROM THE ANDALUSIAN PARLIAMENT* explores the procedures needed to synchronise the textual transcriptions of the Andalusian Parliament, enclosing all sessions' speeches of its Members, and the video recording of the sessions. Since these proceedings of the sessions are stored separately in text and video, this would allow the user to access part of the textual parliamentary proceedings and its correspondent video. In order to correspond video and text, there must be a prior process of video segmentation to split the video into the pertinent segments and later synchronise the different parts of the transcriptions and the video segments.

The tenth paper by Gonçalo Carvalho (KPMG Advisory, Portugal) and Pedro Sousa (Organizational Engineering Center, INESC, Portugal), entitled *BUSINESS AND INFORMATION SYSTEMS MISALIGNMENT: DIAGNOSIS, THERAPY AND PROPHYLAXIS TECHNIQUES BASED ON SYNDROMES* pioneers an organisation's misalignment approach based on medical sciences. The authors defend the observation of organisations as systems and the use of methods analogous to those used in medical sciences, when studying the human body, to improve misalignment categorisation and management skills. The authors establish a correlation between organisations and human bodies and diseases and misalignment, recommending the use of the methodologies employed by medical sciences to diagnose, rectify and prevent misalignments.

The eleventh paper by José Carlos Nascimento, Pedro Pimenta, (University of Minho, Portugal), Sanaz Schroeder (RWTH Aachen University, Germany), Ellen Sjoer (Delft University of Technology, Netherlands), Eamonn Mcquade (University of Limerick, Ireland) and Peter Fabian (University of Zilina, Slovakia) “*SOFT SKILLS FOR YOUNG IS PROFESSIONALS: A VIEW FROM THE FIELD*” describes nontechnical “soft” skills as being a source of concern for organisations and a fundamental element for the success of Information Systems (IS) experts. It aims to provide a deeper insight on how the industry manages this subject and to determine which are the most pertinent “soft skills” to guarantee the smooth integration of new IS experts into organisations. This study is included on – the WeKnow Project – which studies methods and techniques to aid the process of knowledge transmission between specialists and new professionals. The result of this project will be a visionary web-based learning support system- The Web Knowledge Map – which will aid this knowledge transference between professionals.

These papers illustrate the different facets of research done on Applied Computer Science, Information Systems and their Applications and contribute with the work they’ve developed to the enrichment of this field. The review of the relevant literature contributes to the theoretical grounding of these areas and the innovative empirical research on different technologies creates opportunity for the development of pioneering findings.

The Editors,

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