

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 Information Systems and their uses, 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.

The Volume 13, Issue 1 (ISSN: 1646-3692) combines nine selected original papers that bring together researchers covering the wide spectrum of the area of Computer Science and Information Systems in different contexts, such as, Big Data, e-Health, e-Society, Information Systems, Interface and Human Computer Interaction, etc. The authors' contributions embrace significant research topics and intend to provide a current depiction of the research in the field while opening way to future research.

The first paper in this issue by Angel Díaz Pacheco, Jesús A. Gonzalez-Bernal and Carlos A. Reyes-Garcia entitled "A MAPREDUCE BASED FRAMEWORK TO PERFORM FULL MODEL SELECTION IN VERY LARGE DATASETS" focuses on the Big Data paradigm and the importance of analyze large amounts of data in different contexts. In this paper, the authors propose a framework adaptable to any population based meta-heuristic methods in order to perform model selection for very large datasets (Big Data) under the MapReduce programming paradigm.

The second contribution by Uchenna Nnabuko and Stuart Anderson named "THE EFFECT OF ICT ON SOCIAL SUPPORT IN HEALTHCARE: A SYSTEMATIC REVIEW" presents a literature review on the effectiveness of ICT-based tools and intervention on social support measures with reference to health and illness. Relevant databases (PubMed\MEDLINE, clinicaltrials.gov and Cochrane Library) were thoroughly searched. The results of this review propose that ICT could effectively provide social support to individuals, although the degree of its effect could depend on the nature of ICT tools used and the well-being status of individuals.

The third paper, by Danilo Hasse, Fernando A. O. Gauthier, Carlos Roberto De Rolt and Gisiela Hasse Klein, with the title "COORDINATING EMERGENCY RESPONSE BY COMPETENT TEAMS", brings us to the notion how ICTs and social networks can contribute to the emergence of creating competent teams for emergency response. As a result, this study presents a description of a framework for extraction competence profiles by social networks and creation of competent teams in the scope of a project named CO-SEMIWA, a semantic middleware and mobile crowdsensing platform for emergency response.

The fourth paper by Annemijn van Gorp entitled “TOWARDS A CITIZEN-CENTERED INNOVATION SYSTEM FOR EHEALTH” aims to identify what kind of mechanisms influence the development of an e-health system in the Netherlands. By using a Technological Innovation Systems (TIS) approach, through interviews, observation and document analysis, seven functions of an innovation system for e-health were analyzed and obstacles to the system development were identified.

The fifth paper, by Margit Pohl, Elisabeth Weissenböck, Peter Judmaier, Andrea Viertelmayer and Gernot Rottermann, titled “LIFE AT RISK – AN EMPIRICAL INVESTIGATION OF THE DESIGN OF WORKPLACES IN CONTROL ROOMS” reports on an analysis of workplaces in control rooms. The emphasis of this study was on the design of computer interfaces and physical design of the workplaces, in order to help the employees deal with all type of situations. The authors conducted focus groups with employees and interviews with the managers; with the purpose of identify possible challenges of the design of control rooms from different perspectives.

The sixth work with the title “ACTIVITY ANALYSIS (ACTA): EMPOWERING SMART GAME DESIGN WITH A GENERAL PURPOSE FSM DESCRIPTION LANGUAGE” authored by Emmanouil Zidianakis, Margherita Antona and Constantine Stephanidis presents ACTA (ACTivity Analysis), a general purpose finite state machine (FSM) description language for rapid prototyping of smart games. According to the authors, “ACTA facilitates smart game design by professionals who are not familiar with traditional programming languages. Professionals are able to model the game’s logic and interaction using a straightforward and intuitive notation which can be customized for every different game”.

The seventh contribution entitled “SYSTEM REPRESENTATIONS FORMATS AND THEIR INFLUENCE ON USER EXPERIENCE EVALUATIONS” written by Ingrid M. Pettersson, I.C. MariAnne Karlsson and Dimitrios Gkouskos has the general intention to promote the knowledge on how different types of system representations influence the outcome of a User Experience (UX) evaluation. Consequently, the authors examined what information on experiential aspects on a design was activated by two different types’ representations of the same system: a non-interactive representation – a storyboard – and an interactive prototype.

The eighth paper by Ane Irizar-Arrieta, Diego Casado-Mansilla and Aiur Retegi entitled “EVALUATION OF A DIGITAL INTERFACE THAT INTEGRATES USER DIVERSITY TO AWARE INDIVIDUALS ABOUT ENERGY” describes how User Centered Design (UCD) and User Experience (UX) can act as essential tools to improve user engagement in digital interfaces that promote sustainable behaviour at work. As a result, a digital interface that suggests a range of strategies and functions directed to different user archetypes has been developed and evaluated both quantitatively and qualitatively.

The last contribution by Jiayuan Liu called “THE ROLE OF ACTIVITY OBJECTS IN CROWDSOURCED DIGITAL INNOVATION” explores how activity objects organize knowledge for crowdsourced digital innovation. The author used a mixed-methods research approach, presenting results from 355 questionnaires and from 48 interviews. As a result, it was identified “three purposeful, interrelated knowledge orchestration activities to maximize the output of digital innovation: knowledge sharing, knowledge acquisition, and knowledge integration”.

These papers illustrate the different facets of research done on different contexts of Computer Science and Information Systems.. 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 innovative findings.

The Editors

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