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 16, Issue 1 (ISSN: 1646-3692) combines six selected original papers that bring together researchers covering the wide spectrum of the area of Computer Science and Information Systems in different contexts. 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 George Lagogiannis entitled “DYNAMIC CONNECTIVITY: SOME GRAPHS OF INTEREST” explores the dynamic connectivity problem, targeting deterministic worst-case poly-logarithmic time-complexities. It is presented an “algorithm for achieving all the operations of the dynamic connectivity problem on a graph that consists of a forest and a star defined on the same set of vertices, in worst-case logarithmic time”.

The second paper by Marie-E. Godefroid entitled “LIGHTWEIGHT IT AS A NEW ANALYTICAL LENS FOR DIGITALIZATION OF NGOS” focuses on the difficulty that non-governmental organizations (NGOs) have regarding digitalization. The author presents the concept of lightweight IT as a helpful tool in this context. This paper examines existing case studies of different technology use cases in the NGO context.

The third contribution by Jonas Fegert, Carolin Stein, Christian Peukert and Christof Weinhardt named “MISSION STATEMENT ACCOMPLISHED: PROMISES AND CHALLENGES IN USING E-PARTICIPATION FOR MISSION STATEMENT DEVELOPMENT” proposes “an eight-step nominal group process for the participative online creation of a mission statement”. The presented process was verified and assessed within three consecutive studies that enclosed different stages of a mission statement development, which relied on an existing e-participation platform.

The fourth paper by Frank Grave, Rogier van de Wetering and Rob J. Kusters with the title “ENTERPRISE ARCHITECTURE ARTIFACTS FACILITATING THE STRATEGY PLANNING PROCESS FOR DIGITAL TRANSFORMATIONS: A SYSTEMATIC LITERATURE REVIEW AND MULTIPLE CASE STUDY”, explores enterprise architecture artifacts that enable strategy planning processes for digital transformations using a systematic literature review and multiple case studies.
The fifth paper by Fábio Longo De Moura and Filipe De Sá-Soares entitled “DEVISING INFORMATION SYSTEMS AND TECHNOLOGY EVOLUTIONARY PATHS WITH IT-CMF” reports on the application of a Graph Theory to conduct a network analysis of IT-CMF, with the purpose to help entities selecting the evolutionary path with the greatest potential for improving their use of IST (Information Systems and Technology), considering their strengths, weaknesses and priorities.

The sixth paper entitled “MITIGATING THE INSIDER THREAT TO INFORMATION SYSTEMS USING FULLY EMBEDDED AND INSEPARABLE AUTONOMIC SELF-PROTECTION CAPABILITY” by Ghassan (Gus) Jabbour and Jason J. Jabbour presents an autonomic framework (named Insider Threat Minimization and Mitigation - ITMAM) developed to provide information systems with self-defense capabilities, to protect organizations against a malicious action by insider threats.

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.

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