

## EDITORIAL

The IADIS International Journal on Computer Science and Information Systems (IJCSIS) is a peer-reviewed scientific journal published exclusively in an electronic format. 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.

Volume 19, 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. The authors' contributions embrace significant research topics and intend to provide a current depiction of the research in the field while opening the way to future research.

The first paper in this issue by Simon Pfenning, Raul C. Sîmpetru, Niklas Pollak, Alessandro Del Vecchio and Dietmar Fey, entitled "ANALYSIS OF EMBEDDED GPU-ARCHITECTURES FOR AI IN NEUROMUSCULAR APPLICATIONS", focuses on the developments in deep neural network design. This study examines a current "heterogenous embedded platform employing a deep convolutional network for hand position recognition through electromyography signals".

The second paper, by Connor Clarkson, Michael Edwards and Xianghua Xie, entitled "DENSE SEMANTIC REFINEMENT USING ACTIVE SIMILARITY LEARNING", describe a new active learning framework for querying patches of images based on the triplet loss. The authors recommend a new acquisition function based on the similarity of defect properties to refine labels over time, showing the expert only those that are most needed to be labeled.

The third paper, by Maximilian Rosenberg, Bettina Schneider, Christopher Scherb and Petra Maria Asprion, with the title "EDO4SIEM – A PROCEDURE MODEL FOR THE IMPLEMENTATION OF SECURITY INFORMATION AND EVENT MANAGEMENT SYSTEMS IN ORGANISATIONS", focuses on information security, namely SIEM (Security Information and Event Management). The purpose of this study is to develop and corroborate a generic model called 'EDO4SIEM' for the vendor-neutral evaluation, distribution, and operation of a SIEMS in organizations' environments.

The fourth paper authored by Richard Dabels, Marvin Davieds, Frank Russow and Thomas Mundt entitled "PRACTICAL PROBLEMS AND SOLUTIONS TO HORIZONTAL INTEGRATION", focuses on smart environments. This paper evaluates the integration of two smart environments by taking a theoretical approach at how technologies can be connected between two Smart Home systems with the support of a Smart City technology and the difficulties that appear with it.

The fifth paper, entitled “BUSINESS MODEL INNOVATION BASED ON DISRUPTIVE TECHNOLOGIES: A CRITICAL SUCCESS FACTORS CATEGORIZATION” by Mikhail David Edwards and Hanlie Smuts, reports on the identification of several characteristics crucial for the successful implementation of BMI (Business Model Innovation) through effective use of disruptive technologies.

The sixth paper, by Maximilian Helms, Audris Umel, Julia Bosbach, Pia Gebbing and Christoph Lattemann, entitled “THE INFLUENCE OF DIGITAL TRANSFORMATION ON WELL-BEING – ANALYSIS OF LIFE STAGES AND BUSINESS SECTORS”, presents a detailed “investigation into the diverse effects of digital transformation (DT) on employee well-being throughout various life stages and two different work contexts”. It is examined three essential psychological needs (autonomy, relatedness, and competence) as well as physical health.

The seventh paper, by Hanlie Smuts, Paul Louw, Danie Smit, Ingo Waechter and Vanessa Sardinha-da Silva, entitled “OPTIMAL WORKFORCE ALLOCATION FOR QUALITY DELIVERY IN DEVOPS TEAMS: A CASE STUDY”, reports on a case study that identify a mechanism for optimal DevOps workforce allocation, enabling sustainable quality delivery.

The eighth paper authored by Bo Song, Wanting Ma, Zuhua Jiang and Ping Fang, entitled “BUILDING KNOWLEDGE GRAPHS SUITABLE FOR KNOWLEDGE RECOMMENDATION: EXPERIENCE FROM SHIPBUILDING INDUSTRY”, addresses knowledge recommendation systems in the shipbuilding context by constructing knowledge graphs in two ways and comparing their performance in knowledge recommendation.

The ninth and final paper, by Jean-Christophe Sakdavong, Pierre Puigpinos, Nicolas Loiseau and Adrien Bruni, entitled “HOW SELF-EFFICACY EVOLUTION COMBINED WITH HELP SEEKING CHOICES IMPACTS ON LEARNING PERFORMANCE ON A MOBILE LEARNING APPLICATION”, examines the concept of self-efficacy and its impact on help seeking and individual performance on a mobile learning application.

These papers illustrate the different facets of research done in 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 the opportunity for the development of innovative findings.

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