

## 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 20, Issue 2 (ISSN: 1646-3692) combines five 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 contribution to this issue by Aisha Sahaï, Nicolas Souliman and Natacha Métayer entitled "ADAPTING TO COMPLEXITY: LEARNING EFFECTS ON PEDESTRIAN PERCEIVED SAFETY AND UNDERSTANDING OF INTENTIONS DURING INTERACTIONS WITH DRIVERLESS VEHICLES" investigates how young and older adults perceive safety and understand the intentions of driverless vehicles in a shared space using virtual reality. The study found that implementing a bimodal eHMI (external Human-Machine Interface) on driverless vehicles improved pedestrians' perceived safety and understanding of vehicle intentions. Participants preferred having this communication system, as it provided reassurance and clarity. It helped compensate for the lack of traditional human driver cues.

The second paper, by Ravishankar Sharma, Dhanjoo N. Ghista, Edmund Evangelista, Syed M. Salman Bukhari, Kapil Kumar Meena and Ashish Thakur and Iris van Sintemaartensdijk, entitled "INTRODUCING A PHYSIOLOGICAL WELLNESS INDEX (PWI) FOR HEALTH AND WELL-BEING", reports on the Physiological Wellness Index (PWI), a wearable-compatible composite that combines heart rate variability, respiratory rate, and electrodermal activity into a single 0–100 wellness score. The authors conclude that the PWI offers a clear, real-time, and interpretable tool for wellness tracking, enhancing preventive care and decision-making in health and workplace settings.

The third paper entitled "THE EFFECTS OF DIGITAL MATURITY AND BEHAVIORAL INTENTION ON DIGITAL TRANSFORMATION ADOPTION IN LONG-TERM CARE INSTITUTIONS" written by Chin-Wei Wang and Yu-Shih Lee integrates Resource-Based View and UTAUT models to explore how internal resources influence digital maturity and professionals' intention to adopt technology in long-term care institutions. Results show that technology strongly impacts digital maturity, while cultural and organizational factors do not. Personal innovativeness and performance expectancy drive adoption intentions, offering insights for effective digital transformation strategies in aged care.

The fourth paper, by Romain Ferrer, Sorana Cimpan and Hinata Yokoyama with the title “COMPETENCY CENTERED CURRICULA MAPPING SUPPORT: THE FORESTED VISUALIZATION TOOL”, introduces ForestED, an interactive visualization tool that clarifies how courses contribute to developing competencies in competency-based education. The tool makes explicit the relationships between competencies and courses and enables users to infer competency development over time through the course timeline.

The fifth and final contribution authored by Gabriel Lenz Balatka & Rafael Stubs Parpinelli entitled “AUTOMATED MACHINE LEARNING FOR HYPERPARAMETER OPTIMIZATION IN POINT CLOUD PART SEGMENTATION”, explores the optimization of PointNet architecture for point cloud part segmentation, specifically tailored to the unique characteristics of object categories. Using the PartNet dataset, the authors applied hyperparameter optimization across four case studies and three-point cloud sizes (512, 1,024, and 2,048). Results demonstrated a 2-6% accuracy improvement in test metrics, with consistent performance across categories, highlighting the effectiveness of hyperparameter tuning for segmentation tasks.

These papers highlight the diverse aspects of research conducted across various contexts within Computer Science and Information Systems. The literature reviews provide a strong theoretical foundation for these fields, while the empirical investigations into different technologies offer valuable opportunities for generating innovative insights.

The Editors

Pedro Isaías  
Universidade Aberta (*Portuguese Open University*), Portugal

Marcin Paprzycki  
SWPS, Poland