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 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 contribution to this issue by Andrej Jerman Blažič, and Tanja Pavleska entitled "BRIDGING THE DIGITAL DIVIDE WITH A GAME-BASED APPROACH" investigates how game-based learning and assessment can help older adults develop digital skills through DiGiUP (a game-based approach developed specifically for older adults) program. Using real-life scenarios, 45 participants showed improved problem-solving abilities and greater confidence in digital environments after gameplay. Results highlight the effectiveness of engaging, collaborative learning in bridging the digital divide.

The second paper, by Kimberly Bluhm, Steven Watson, Jurjen Jansen and Iris van Sintemaartensdijk, entitled "KNOWING BETTER, DOING BETTER: THE ROLE OF ACTUAL AND PERCEIVED KNOWLEDGE OF SELF-PROTECTIVE BEHAVIOUR ON PROTECTION MOTIVATION", examines how actual vs. perceived knowledge affects individuals' intent to adopt self-protective behaviors. Using data from online questionnaires, the authors found actual knowledge to be a stronger predictor of protective actions than perceived knowledge. Both knowledge types are important but influence different forms of efficacy—actual knowledge boosts response efficacy, while perceived knowledge enhances self-efficacy. This study builds on previous research and offers guidance for future cybersecurity awareness efforts.

The third paper entitled "POST-HOC NATURAL-LANGUAGE EXPLANATIONS OF COMPONENT-BASED KNOWLEDGE GRAPH QUESTION ANSWERING SYSTEMS GENERATED BY LLMS" written by Dennis Schiese, Aleksandr Perevalov and Andreas Both focuses on improving explainability by analyzing the input-output data flows of AI-driven KGQA (Knowledge Graph Question Answering) components. The paper explores generating explanations for component-based Question Answering (QA) systems, focusing on data flows

rather than internal AI logic. Experimental results show that LLM-generated explanations are clearer and more effective, enhancing user understanding of system decisions.

The fourth paper, by Timor Schwartz Miler and Nili Steinfeld with the title “INTERGROUP INTERACTION AND IDENTITY EXPRESSION IN IMMERSIVE SOCIAL VIRTUAL REALITY”, explores how bias, cooperation, and power asymmetries emerge between minority and majority groups in social virtual reality (SVR). It sheds light on intergroup dynamics in SVR environments, emphasizing the intricate interplay between established social structures and newly introduced technological mediation."

The fifth paper authored by Solett Smuts and Hanlie Smuts entitled “BEYOND THE BEEP: REIMAGINING SCREEN READER USABILITY WITH UX AT THE FOREFRONT”, reports on how digital technologies are integral to daily interactions and how users with visual impairments face unique challenges. In the context of computer-aided drawing for the blind, understanding how visually impaired users interact with technology is crucial for enhancing usability and spatial navigation. This study reviewed 18 scholarly works with the purpose to identify key user experience (UX) principles for screen readers, which are essential for digital accessibility.

The sixth paper, entitled “FROM DATA COLLECTION AUTOMATION TO SEQUENCE ANALYSIS: A GENERAL METHODOLOGY ENABLING DATA ANALYSIS OF CORPORATION CAREERS” authored by Yinglei Han, Dario Colazzo and François-Xavier Dudouet, introduces a methodology for examining corporate career data extracted from professional CVs. The process starts with collecting resumes in JSON (JavaScript Object Notation) format and storing them in a centralized repository. The data is structured into relational and graph databases for multidimensional analysis. By combining database techniques and machine learning, the framework allows for in-depth analysis, such as tracing career paths and identifying patterns among business leaders.

The seventh paper, with the title “GREEN BYTES: LEVERAGING KNOWLEDGE MANAGEMENT FOR SUSTAINABLE ORGANIZATIONS” written by Hanlie Smuts, explores key knowledge management (KM) strategies for promoting green IT and organizational sustainability, addressing the environmental impact of IT practices. Based on 539 survey responses, three core KM strategies were identified: performance tracking, dark data management, and knowledge exchange. The findings highlight the need for interdisciplinary collaboration to align KM efforts with sustainability goals, emphasizing the divergence between KM communities and data professionals.

In the eight contribution, authored by Mohammed Alyami, Natalia Beloff and Martin White, entitled “ADOPTION DETERMINANTS OF FOG COMPUTING IN SAUDI ARABIAN PUBLIC ORGANISATIONS: A MIXED-METHODS STUDY USING THE FCA-SAPO FRAMEWORK”, the authors explore the adoption of fog computing in Saudi Arabian public organizations, identifying key influencing factors, benefits, and challenges. Through qualitative interviews and a large-scale quantitative survey, it found that factors like privacy, complexity, and senior management support were not significantly linked to adoption intention. The research emphasizes the importance of technical, organizational, environmental, and financial factors in successfully adopting fog computing, providing strategic insights for IT managers in the public sector.

In the last paper, authored by Dijana Vuković, Tanja Grmuša and Goran Luburić, entitled "DEVELOPMENT OF ORGANIZATIONAL CULTURE, EMPLOYEE RESILIENCE AND BUSINESS IN THE ERA OF DIGITAL TRANSFORMATION: ATTITUDES OF CROATIAN MANAGERS AND EMPLOYEES", the authors examine how digital transformation affects organizational culture, employee resilience, and business operations. It highlights how technological change reshapes communication, workflows, and internal dynamics within companies.

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

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