Computer Science and Information Systems 21(3): i–iii https://doi.org/10.2298/CSIS240300iI

Editorial

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The third issue of Volume 21 of Computer Science and Information Systems features 13 regular articles and two special sections: "Papers selected from European Conference on Advances in Databases and Information Systems (ADBIS)" (3 articles) and "Computer Science and Information Systems Applied to Management, Innovation and Sustainability" (3 articles). As customary, we are thankful for the hard work and enthusiasm of our authors, reviewers, and guest editors, without whom the current issue and the publication of the journal itself would not be possible.

We are happy to announce the updated impact factors of our journal for 2023: the new two-year IF 1.2, and the five-year IF 1.1.

The first regular article, "Low-Code Development Using Requirements and Knowledge Representation Models" by Kamil Rybiński and Michał Śmiałek, presents a visual language RSL-DL that can be used to represent non-standard domain logic (i.e., data processing) operations in a visual form, to complement existing visual code tools for visually describing the user interface and standard application logic. RSL-DL allows to capture domain knowledge with complex domain rules aligned with requirements models, while the RSL-DL environment includes an inference engine that enables processing queries to domain models and selecting appropriate invocations to generated code.

In the second regular article, "A Practical and UC-Secure Decentralized Key Management and Authentication Scheme Based on Blockchain for VNDN," Xian Guo et al. introduce an efficient decentralized key management solution based on blockchain for vehicular named data networking (VNDN), which tackles the vulnerability of having a centralized certificate authority by completely eliminating it. Also, based on this key management scheme, a lightweight mutual authentication scheme and a key agreement protocol for vehicle-to-everything (V2X) are proposed.

"SSEPC Cloud: Carbon Footprint Aware Power Efficient Virtual Machine Placement in Cloud Milieu," by Bivasa Ranjan Parida et al. propose a hybrid metaheuristic technique combining the salp swarm optimization and emperor penguins colony algorithm (SSEPC) to place virtual machines in the most suitable regions, availability zones, datacenters, and servers in a cloud environment, while optimizing consumption of energy and carbon emissions, as well as average response time and service level agreement (SLA) violations.

Đorđe Pešić et al., in "A Novel Approach to Source Code Assembling in the Field of Algorithmic Complexity," propose a novel template- and rule-based approach and a corresponding software system for assembling synthetic source code segments of defined time complexity for the purposes of teaching computational complexity analysis. Based on the developed grammar, the system can produce source code segments with a broad scope of different time complexities while guaranteeing the complexity of the generated segment.

The article "Medical Record Information Storage Scheme based on Blockchain and Attribute Role-Based Access Control," authored by Aoao Bian et al., proposes a solution for secure storage and sharing of medical record information based on blockchain, combining role-based access control (RBAC) with attribute-based access control (ABAC). Advanced encryption standard and feature-aware stateful routing technologies are applied to further enhance the security and storage efficiency of the scheme.

In their article entitled "CTA-Net: A Gaze Estimation Network Based on Dual Feature Aggregation and Attention Cross Fusion," Chenxing Xia et al. propose a parallel CNNs-Transformer aggregation network (CTA-Net) for gaze estimation, which fully leverages the advantages of the Transformer model in modeling global context while the convolutional neural networks (CNNs) model is beneficial for retaining local details.

"The Security and Privacy Challenges Toward Cybersecurity of 6G Networks: A Comprehensive Review," by Yanlu Li et al. analyzes the security issues of 6G networks and presents some possible solutions. After discussing recent developments in mobile communication technology (research and performance motivation behind 6G networks, as well as key technologies), security threats in 6G networks are analyzed concerning architecture, major visions and related applications, followed by solutions to security issues in applying key technologies for 6G networks.

Antonio Menta and Ana Garcia-Serrano, in their article "Reaching Quality and Efficiency with a Parameter-Efficient Controllable Sentence Simplification Approach," tackle the resource hungriness of current approaches to automatic text simplification (ATS) based on large language models (LLMs) by proposing an accurate solution when powerful resources are not available, using the transfer learning capabilities across different domains with a set of linguistic features employing a reduced size pre-trained language model.

In "Visit Planner: A Personalized Mobile Trip Design Application based on a Hybrid Recommendation Model," Harris Papadakis et al. present Visit Planner (ViP), a mobile application prototype that provides a solution to the challenging tourist trip design problem. ViP follows a holistic approach offering personalized recommendations for Points of Interest (POIs) based on preferences either explicitly collected by the application, or inferred by the users' ongoing interaction with the system.

In their article "ECW-EGNet: Exploring Cross-Modal Weighting and Edge-Guided Decoder Network for RGB-D Salient Object Detection," Chenxing Xia et al. propose an Exploring Cross-Modal Weighting and Edge-Guided Decoder Network (ECW-EGNet) for RGB-D salient object detection (SOD), which includes three prominent components: a Cross-Modality Weighting Fusion (CMWF) module, a Bi-directional Scale-Correlation Convolution (BSCC) module, and an Edge-Guided (EG) decoder.

"MakeCode Arcade Platform for Game-Based Learning," by Patrik Voštinár presents research into whether the MakeCode Arcade environment is suitable for teaching programming through games as a game-based learning platform. Conclusions from a survey taken by 315 students are drawn, and experiences in using the tool in different settings are described: teaching in extracurricular activity at university level, teaching normal lessons in primary schools, use as a motivational tool for distance workshops, and also in workshops for teachers.

The article "News Recommendation Model Based on Encoder Graph Neural Network and Bat Optimization in Online Social Multimedia Art Education," by Jing Yu et al. pro-

pose a novel news recommendation model based on encoder graph neural network (GNN) and Bat optimization in online social networks, where Bat optimization used to improve the effect of news clustering, the concept of metadata is introduced into the GNN, and the ontology of learning resources based on knowledge points is established to realize the correlation between news resources.

Finally, “Agile Culture Clash: Unveiling Challenges in Cultivating an Agile Mindset in Organizations,” by Michael Neumann et al. identifies challenges that arise from the interplay between agile culture and organizational culture, using a mixed-method research approach: gathering qualitative data among from a network of agile practitioners, and obtaining quantitative data by means of a questionnaire study with 92 participants. Seven key challenges were identified, referring to technical agility (doing agile) and cultural agility (being agile).