Guest Editorial: Papers selected from European Conference on Advances in Databases and Information Systems

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This special guest section publishes three extended versions of selected papers accepted in workshops held in conjunction with ADBIS 2022: European Conference on Advances in Databases and Information Systems (http://adbis.eu/). Workshops covered diverse topics, such as intelligent data processing, large-scale knowledge graph analysis, modern data engineering, advanced data systems management, and semantic web design for cultural heritage.

The selected papers were chosen considering their technical quality assessed by the international program committee that evaluated workshop papers. They went through a strict evaluation of four reviewers, specialists in the topics of the papers. The following papers were included into this special guest section of ComSIS.

1. "Operators for Semantic Graph Databases as Graph Rewriting", by Adrien Boiret, Cédric Eichler, and Benjamin Nguyen: This paper introduces basic graph rewriting operators for constructing sanitization mechanisms. The contribution is a formal framework for sanitizing semantic graph databases, enhancing privacy protection while facilitating data sharing and publication.

2. "A Review: Biological Insights on Knowledge Graphs", by Ylenia Galluzzo: This paper surveys knowledge graph applications in biology and clinical contexts, focusing on recent progress in biomedical knowledge representation. The paper suggests future research avenues to enhance precision medicine in biomedicine.

3. "Abstract machine for operational semantics of domain-specific language", by William Steingartner, Róbert Baraník, and Valerie Novitzká: This paper delves into structural operational semantics for a domain-specific language focusing on robot control. It presents a method for abstract implementation on an abstract machine, contributing to semantic methods research in software engineering. An application is introduced to visualize program execution steps, aiding formal semantics teaching for domain-specific languages.

The Guest Editors extend their sincere gratitude to everyone who contributed to the success of this special issue. We thank the authors for sharing their scientific insights with the community. Authors invested effort in producing the versions that are published in ComSIS, considering reviewers' suggestions and requests for consolidating the work presented in the papers.

We are also profoundly thankful to Prof. Mirjana Ivanović, the editor-in-chief of Computer Science and Information Systems (ComSIS), for her invaluable guidance and support throughout the process. We are also grateful with Prof. Sonja Ristić of the ComSIS consortium for her help in the evaluation process of the selected papers.

A special acknowledgment is due to the reviewers for their constructive feedback significantly enhanced the quality of the papers accepted for this special issue.