Editorial

The *International Conference on Information Systems, Embedded Systems, and Intelligent Applications* (*ISESIA*) 2023 was held in Sofia, Bulgaria, from May 26 to May 27, 2023. You can access detailed information about the event at ISESIA's official website `https://isesia.fmi.uni-sofia.bg/`.

This conference was a collaborative undertaking between the Department of Computer Informatics at the Faculty of Mathematics and Informatics of Sofia University "St. Kliment Ohridski" and the Bulgarian Chapter of the Association for Information Systems (BulAIS), with financial support from both the Science Fund of Sofia University and BulAIS.

Building on the legacy of 15 successful editions of the Information Systems and Grid Technologies (ISGT) conference, ISESIA 2023 retained its core focus on addressing fundamental challenges and technological advancements in the domain of Information Systems (IS) while expanding its thematic horizons. The conference's primary objective was to foster an open and dynamic platform for the exchange of ideas and the exploration of ongoing research trends, innovative methodologies, and original research outcomes across various facets of Information Systems, Intelligent Systems, and Distributed and Cloud Systems.

ISESIA 2023 encompassed a wide spectrum of interconnected topics, including:

- Databases and Information Systems Integration
- Big Data Innovations
- Data Analytics
- IS Security, Privacy and Ethics
- Business Models and Business Processes
- Advances in IS Programs and Education
- Knowledge Representation and Reasoning
- Machine Learning
- Data Mining and Knowledge Discovery
- Natural Language Processing and Information Retrieval
- Responsible Artificial Intelligence
- Smart Robots
- Computer Vision

- Modeling, Clustering, Virtualization, SOA
- P2P, IoT, Mobility
- Application-specific Grid and Cloud.

In conjunction with the central ISESIA program, the conference hosted three specialized workshops:

- *MIRACle*: Modeling Robotic Assistance
- *eHealth*: IS and Health Information Technology Adoption
- *UNITe*: Data Engineering, Data Analysis and Visualization

The *MIRACle workshop* concentrated on the latest advancements in the fields of embedded systems, mobile robotics, and autonomous human assistance. Key research areas covered in this workshop included: advancements in high-level and intelligent control techniques for mobile robotics; scalable multi-agent, peer-to-peer, and distributed embedded systems; innovative data services for sensor streaming and related topics.

The primary objective of the *eHealth workshop* was to address key issues and offer a comprehensive perspective on the contemporary implementation and adoption of eHealth. This workshop featured works related to various aspects of eHealth, such as artificial intelligence in healthcare, digital health literacy, and the application of information technologies in the healthcare sector.

The *UNITe workshop* aimed to provide a platform for the exchange of ideas and results in thematic areas related to data engineering, effective data utilization, and the creation of efficient models for data analysis and visualization. Research presented at this workshop primarily focused on new approaches for semantic modeling, the development of decision support systems, and enhancing the utilization of available data by fostering interoperability at different levels.

A total of 37 papers were submitted for consideration at ISESIA 2023. Each paper underwent review by at least two members of the Program Committee and a panel of invited experts. Ultimately, the Program Committee selected 29 papers for presentation at the conference, with 11 of them accepted for publication in the current volume of the Annual of Sofia University, Faculty of Mathematics and Informatics.

ISESIA 2023 featured a diverse range of research and practical results, shared experiences, and in-depth discussions, offering significant value to the Information Systems community, particularly benefiting young IS researchers and PhD students.