

# Preface: Modeling, Optimization, and Controlling in Information and Technology Systems Workshop

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## Abstract

This document is the preface of the Modeling, Optimization, and Controlling in Information and Technology Systems Workshop of the 8<sup>th</sup> International Conference on Computational Linguistics and Intelligent Systems (CoLInS 2024), April 12–13, 2024, held in Lviv, Ukraine. This Workshop is **dedicated to honouring the memory of academician Ivan Kuzmin**, who was born on February 2, 1924. On his bright life path, Ivan Kuzmin set aeroplanes, space rockets, and scientific schools “on the wing”, and made a decisive contribution to the establishment of the Vinnytsia National Technical University (Ukraine). He was an apologist for the scientific knowledge of the Universe. We continue the traditions laid down by him.

## Keywords

System modelling, optimization, information technology, controlling, independent component analysis

## 1. Preface

The main purpose of the Modeling, Optimization, and Controlling in Information and Technology Systems Workshop is the recent research results discussion in all areas of Information Technology for Intelligent Systems Development [1-6]. The workshop aims to discuss and share theoretical and applied experience related to the use of modelling, optimization and management methods in information, industrial, energy, transport, medical, environmental, communal and other modern technological systems at the level of components, subsystems, systems, complexes and environment. The workshop is a favourable mobile platform for discussing the latest scientific ideas, research and development aimed at solving the challenges and problems formally defined for information and technology processes within the scope of the above aim.

The workshop is soliciting literature review, survey and research paper comments including, whilst not limited to, the following areas of interest:

- Modelling of information and technology processes;
- Optimization of information and technology processes;
- Management of information and technology processes;
- Monitoring and diagnosis of information and technology processes;
- Data analysis of information and technology processes;
- Ensuring the security of information and technology processes;
- Improvement of information support of technological systems.

The language of the Modeling, Optimization, and Controlling in Information and Technology Systems Workshop is English.

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The Modeling, Optimization, and Controlling in Information and Technology Systems Workshop took the form of an oral presentation by peer-reviewed individual papers.

The papers were distributed among 93 external reviewers from France, Germany, The Netherlands, the United States, the United Kingdom, India, Moldova, Czech Republic, Poland, Bulgaria, Portugal, Serbia, Slovenia, Finland and Ukraine. To make more correct decisions regarding the acceptance or rejection the papers got 3-7 reviews.

The Modeling, Optimization, and Controlling in Information and Technology Systems Workshop gathered participants from different countries including Germany, Ukraine, Israel, Poland, Belgium, Switzerland, and France.

This year Organizing Committee received 36 submissions, out of which 18 were accepted for presentation as regular papers.

These papers and extended abstracts were published in Volume II of the 8<sup>th</sup> International Conference on Computational Linguistics and Intelligent Systems (CoLInS 2024) proceedings.

## 2. Acknowledgements

The Modeling, Optimization, and Controlling in Information and Technology Systems Workshop would not have been possible without the support of many people. First of all, we would like to thank all the authors who submitted papers to the Modeling, Optimization, and Controlling in Information and Technology Systems Workshop and thus demonstrated their interest in the research problems within our scope. We are very grateful to the members of our Program Committee for providing timely and thorough reviews and, also, for being cooperative in doing additional review work. We would like to thank the Organizing Committee of the conference whose devotion and efficiency made this instance of the Modeling, Optimization, and Controlling in Information and Technology Systems Workshop a very interesting and effective scientific forum. We would like to thank the Modeling, Optimization, and Controlling in Information and Technology Systems Workshop Chairs, as well as the Program Committee and all Reviewers, for their diligence in selecting the papers and ensuring their high scientific quality.

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