

Foreword

A warm welcome to participants of the International Conference on Computer Science and Information Technologies (CSIT-2021), the thirteenth in a series of biennial conferences held in the capital of Armenia, Yerevan. The conference has been held since 1997 and aims at promoting the exchange of information between researchers in the field of computer science and information technologies.

We are grateful to all new and former conference participants who responded to our invitation.

Taking into consideration the health and safety of all our participants, the CSIT-2021 will be held in mixed face-to-face and online formats. Sessions for present participants will be held in the Conference Hall of the Institute for Informatics and Automation Problems of the National Academy of Sciences of the Republic of Armenia and in the National Polytechnic University of Armenia.

The main topics of CSIT-2021 include: Computing Models and Their Applications, Artificial Intelligence and Machine Learning, Telecommunications and Networks, Cloud and High Performance Computing, Big Data and the Internet, Pattern Recognition and Image Processing, Discrete Mathematics and Combinatorial Analysis, Information Technology Applications, Information Security and Information Theory.

CSIT 2021 starts with a plenary session, followed by breakout sessions and workshops. About 100 reports of participants from Armenia, Canada, Georgia, Iran, France, Russian Federation and Ukraine were presented at the conference. Among them are specialists from the Institute of System Programming, the Institute of Energy Systems of the Siberian Branch of the Russian Academy of Sciences, the Institute of Computer Science of the Polish Academy of Sciences and universities: Moscow State University, St. Petersburg University, French University of Armenia, Russian-Armenian University, National Polytechnic University, etc. They present the results of both theoretical and applied research.

The conference also includes three workshops: "Digital Technologies in Education and Management", "Use of UAVs for Monitoring Hard-to-Access Objects", "Internationalization of Armenian Science: Challenges and Solutions".

The first workshop is organized jointly with the National Polytechnic University of Armenia and the State University of Management (Moscow, Russia) The main aim of the seminar is developing a platform to stimulate international interdisciplinary digital exchange dedicated to education and management. Topics also include innovative education based on digital technologies, assessment of active teaching and learning technologies, cybersecurity management and data protection organization.

The second workshop is organized jointly by the Institute for Informatics and Automation Problems of the National Academy of Sciences of Armenia, the National Polytechnic University of Armenia and the Yerevan Scientific Research Institute of Communications. The seminar aims to discuss issues of methodology, technical implementation and use of UAVs for monitoring hard-to-reach objects (bridges, tunnels, high-rise buildings, power plants and power lines, water supply channels, roads, etc.) to assess the technical condition.

The third workshop is intended to come together and discuss the internationalization of Armenian science on the agenda of the Armenian academic field and the latest developments in global open science community. It will also cover the work done so far in this direction. The topics of workshop are as follows: Global science clouds to support cross-disciplinary open science, including European Open Science Cloud; Research data management standards and principles, including the FAIR principle; Readiness of Armenian scientific community towards open data; Integration of Armenia in Open science movement: achievements and further steps; Open data repositories: risks and opportunities. Target groups of the workshop: Researchers and students; Editors of scientific journals; Administrative staff of scientific organizations; Policy makers in the field of science.

We are grateful to the National Polytechnic University of Armenia, Center for Digital Technologies, Yerevan Telecommunication Research Institute, Center for Analysis and Monitoring of Scientific Information for fruitful cooperation and organization of workshops.

The conference is supported by the National Academy of Sciences and the State Science Committee of the Republic of Armenia, and we express our gratitude to them.

We would like to thank all the conference participants for their contribution and hope that they will have the opportunity to get to know Armenia better.

We thank the organizing team for providing the necessary and favorable conditions for the conference.

We wish you all productive work in Yerevan.

Yuri Shoukourian,

Conference Chair