

## Foreword

Welcome to International Conference on Computer Science and Information Technologies (CSIT 2019), the twelfth in the series of biennial conferences that focuses on innovation in the field of computer sciences and information technologies. Welcome to Yerevan, Armenia!

The conference has been held since 1997. The Conference aims to encourage the exchange of scientific and technological information between researchers and practitioners for establishing new collaborations.

The major topics of CSIT 2019 include but are not limited to: Design and Test; Discrete Mathematics and Combinatorial Analysis; Information Technologies Applications; Artificial Intelligence and Pattern Recognition; Parallel and Distributed Computing; Algorithms, Automata and Logic; Information Theory; Telecommunication and Networking. Over the past nineteen years, CSIT has extended the covered topics continuously: Deep Learning and Data Science directions are added recently. This year more than 80 researchers and practitioners from Armenia, Canada, France, Georgia, Iran, Norway, Philippines, Russian Federation, Ukraine and US are presenting their results on the mentioned topics.

The CSIT 2019 program will be opened by a keynote speech followed by plenary presentations. Besides the Main Program, a Round Table and three Workshops will be organized within the framework of CSIT 2019.

Powerful supercomputers play a significant role in addressing a wide range of societal, industrial and scientific challenges. The Round Table “HPC Community Building in Armenia” aims to bring together researchers, developers and industrial users of HPC to discuss new ideas, new experiences and new problems in HPC. The goal is to identify further the role and the scope of the National Supercomputer Center in Armenia as the first in the region 274TFLOP supercomputer.

The main goal of the “Digitalization of Education and Management” Workshop is to become a platform for inspiring the international and interdisciplinary exchange of ideas and projects among researchers and practitioners at the forefront of Digitalization focusing on Education and Management.

The “Scientometrics in Practice” Workshop aims to introduce the role of scientometrics in evaluation and assessment of science in the world, to present current examples of scientometrics use making a special focus to Armenia.

In addition, a parallel event - the 4th Eastern Partnership E-Infrastructures Conference “Connecting with Culture”, EaPEC 2019 will be held on 25-26 September at the Matenadaran Institute of Ancient Manuscripts in Yerevan. The conference aims to serve as a platform for collaboration on policy and research and to support community building in E-Infrastructures between the Eastern Partnership region and the EU member states. The current two-day conference will focus on use of E-Infrastructures for Open Science in Europe.

CSIT is also organizing an exciting social program, which will provide access to some remarkable Yerevan and Armenia exhibits and opportunity for informal discussions among participants in a relaxed setting.

We thank the IEEE Computer Society, the IEEE Computer Test technology technical Council for continued technical sponsorship and support in publication of the Conference selected papers and we are indebted to the National Academy of Sciences and the State Committee of Science of Armenia for the continuous support of the conferences. We thank all participants of the Conference for their contributions.

Wishing you all a productive work in Yerevan, Armenia.

*Yuri Shoukourian,*

*Conference Chair*