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PREFACE

Welcome to XIVth International Scientific and Technical Conference **Computer Sciences and Information Technologies CSIT 2019**, which is organized by IEEE Ukraine Section, IEEE West Ukraine AP/ED/MTT/CPMT/SSC Societies Joint Chapter, Lviv Polytechnic National University, Institute of Computer Science and Information Technologies, supported by Technical University of Lodz Poland, Institute of Information Technologies, patronized by Ministry of Education and Science of Ukraine.

The international conference **Computer Sciences and Information Technologies**, established in 2004, is annually organized with the principal aim to discuss modern trends in computer sciences, information technologies, applied linguistics, and others related areas. To achieve this goal, various aspects of computer science will be presented in such major topics:

- Artificial Intelligence
- Cyber-Physical Systems
- Software Engineering
- Applied Linguistics
- Intelligent Management Technologies
- Mathematical Modeling
- Big Data and Data Science
- ICT in Higher Education
- Data and Knowledge Engineering
- Project Management

CSIT 2019 Program Committee evaluated over 250 submitted papers from China, Czech Republic, France, India, Ireland, Japan, Kazakhstan, Poland, Serbia, Turkey, Slovakia, Spain, and Ukraine to crystallize a high-level technical program of oral presentations. To continue previous successful practice, CSIT 2019 hosts three international scientific workshops: *International Workshop on Inductive Modelling IWIM-2019*, *International Workshop on Project Management IWPM 2019*, and *International Workshop on Information modeling, Data and knowledge engineering IWIMDKKE 2019*, all supported by IEEE.

The sincerest, boundless gratitude of organizers is sent to members of International Program Committee, who supported CSIT 2019 conference by participating in it, their comprehensive reviews allowed the conference to participate in the promotion of science and technological excellence. It should be proudly mentioned, that some papers are common for several institutions, and even countries, involved in the conference. Such examples of international cooperation, that we have noticed in papers, submitted this year, has inspired CSIT 2019 International Program Committee and Organizing Committee to encourage the cooperation.

Conference CSIT 2019 and satellite Workshops will be held in Lviv which is the largest city in Western Ukraine and the seventh largest city in the country overall. The historical heart of Lviv city is famous for its old buildings. The city center is on the UNESCO World Heritage List.

Lviv is one of the most important cultural centers of Ukraine, famous for art, literature, music and theatre. It hosts more than 100 festivals annually, has 60 museums and 10 theatres. With regard to its urban fabric and architecture, Lviv is an outstanding example of the fusion of the architectural and artistic traditions of Central and Eastern Europe with those of Italy and Germany. The CSIT 2019 conference will be held in early autumn, and Lviv will be at its best: the city is famous for its welcoming and hospitality, its beautiful parks, diverse cuisine, fascinating history and charismatic architecture. Please, be sure of our warmest gratitude for you interest and participation in the conference.

We are looking forward to welcoming you in Lviv and at CSIT 2019!

Sincerely yours,



Mykola Medykovskyy
Director of Institute of Computer Sciences and
Information Technologies of Lviv Polytechnic
National University, Ukraine
CSIT 2019 Executive Chair

Lviv 2019

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