
Preface

The 1st International Workshop on Advanced Information and Computation Technologies and Systems (AICTS) was held online December 7-11, 2020 at the Matrosov Institute for System Dynamics and Control Theory (ISDCT) of the Siberian Branch of the Russian Academy of Sciences (SB RAS), Irkutsk, Russia (<https://aicts.icc.ru/>). It addresses the theoretical and practical issues and challenges in developing and using advanced information and computation technologies and systems related to various subject domains of information, technical, economic, and other fields of human activity. Its participants discussed innovative ideas and achievements on the aforementioned technologies and systems.

Within the framework of the 1st International Workshop, we grouped the topics for discussion into the following key directions: Theoretical foundation, algorithms and models, Methods and tools for the development and application, Mathematical modeling, Artificial intelligence, Agents, Robots, Internet of Things, Decision-making support, Parallel and distributed computing, Data Science, Education, Geo-informatics, Energy, and Nature management and monitoring.

Fifty-seven participants from nine countries related to holding the workshop. They discussed innovative ideas and achievements on the aforementioned technologies and systems.

All submitted papers were evaluated based on their originality, novelty, quality, and technical contribution. We thank all Program Committee Members and subreviewers invited by them for their help in selecting papers.

We provided the two-level reviewing. At the first level, we have selected 24 work for their presentation at the Workshop from 43 submitted ones. At the second level, we have accepted 20 papers to publish in the Workshop Proceedings from the earlier selected works taking into account the presented reports. Thus, we accepted 46.5% of the total number of the submitted works for publication.

We sincerely hope that the results represented by the Workshop Proceedings will be in demand by readers that are close to the Workshop topics.

We were supposed to have a physical location of the Workshop. Unfortunately, all sessions of the Workshop have been held online owing to the difficult epidemiological situation caused by COVID-19 in Irkutsk. Nevertheless, the Workshop allowed all participants to successfully discuss the state and experience of art study in the aforementioned topics.

We value the significance of personal meetings. In this regard, we will continue further to expand the number of Workshop participants from different countries in a physical location in order to exchange new scientific and practical results related to developing advanced information and computation technologies and systems.

March 2021

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