# Science Book Publishing House, USA Baku State University, Azerbaijan Lipetsk State Technical University, Russian Federation Academy of Federal Security Guard Service of the Russian Federation, Orel, Russian Federation

Don State Technical University, Rostov-on-Don, Russian Federation

Vologda State University, Russian Federation

# MODERN INFORMATIZATION PROBLEMS IN SIMULATION AND SOCIAL TECHNOLOGIES

Proceedings of the XXIII-th International Open Science Conference (Yelm, WA, USA, January 2018)



Science Book Publishing House Yelm, WA, USA - 2018 Modern informatization problems in simulation and social technologies: Proceedings of the XXIII-th International Open Science Conference (Yelm, WA, USA, January 2018)/ Editor in Chief Dr. Sci., Prof. O.Ja. Kravets. - Yelm, WA, USA: Science Book Publishing House, 2018. – 100 p. (101-200)

#### ISBN 978-1-62174-108-4

Proceedings summarizing the results of the XXIII-th International Open Science Conference "Modern informatization problems in simulation and social technologies", held in November 2017 - January 2018. It contains information within the following areas: **info-communications in education and medicine, analysis and synthesis of complex systems**.

Data gathered within collected papers may be useful to researchers and engineering technicians, whose work involves various aspects of modern society informatization, as well as to postgraduates and students studying subjects related to informatics and computer engineering.

#### **Proceedings Editorial Board:**

O.Ya. Kravets, Dr. Sci., Prof. (editor in chief, Science Book Publishing House, USA); A.A. Aliyev, Dr. Sci., Prof. (Baku State University, Azerbaijan); S.L. Blumin, Honored Scientist of Russian Federation, Dr. Sci., Prof. (Lipetsk State Technical University, Russian Federation); E.V. Lebedenko, Dr. (Academy of Federal Security Guard Service of the Russian Federation, Orel, Russian Federation); A.D. Lukyanov, Dr. (Don State Technical University, Rostov-on-Don, Russian Federation); S.L. Podvalny, Honored Scientist of Russian Federation, Dr. Sci., Prof. (Voronezh State Technical University, Russian Federation); A.M. Vodovozov, Prof. (Vologda State University, Russian Federation)

#### **Preface**

Dear Colleagues!

Present proceedings were published to summarize the results of the XXIII International Open Conference "Modern informatization problems in simulation and social technologies". The conference was held through the joint efforts of Science Book Publishing House (USA), Baku State University (Azerbaijan), Vologda State University, Lipetsk State Technical University, Don State Technical University (Rostov-on-Don), and the Academy of Federal Security Guard Service of the Russian Federation (Orel), in November 2017 – January 2018.

Proceedings contain information within the following areas: infocommunications in education and medicine, analysis and synthesis of complex systems.

The conference was held to encourage exchange of experience between leading experts in utilization of information technologies in various spheres of science, engineering, and education. The conference followed the traditions established by its predecessors.

Representatives of leading research centers and educational institutions some countries introduced the audience to the results of their research, which are available not only in this collected works, but on http://www.sbook.ru/spi.

Organizing Committee Chair, Editor in Chief Dr. Sci., Prof.

O.Ja. Kravets

## **Author's index**

Afanasyev V.V	104
Barabanova I.A	108
Baranov I.Y	112
Belonozhko E.D	125
Blagiy V.A	104
Bolnokin V.E	116
Davydov V	129
Dzhevaga K.A	
Fedosov A.S.	112
Grushevaya E.V	191
Izotova T.Yu	
Karamihova O.V	125
Kravets O.Ja	139
Kuchuk G.G	134
Kutsakin M.A	160
Lapko A	129
Makeev S.M	191
Mironov O.U	134
Mironov O.U	160
Mysin O.D	191
Naletov P.A	139
Nguyen Thi Hien	150
Orlov A	129
Popov S.V	154
Ryabokon' V.V	160
Sergeev M.Yu	164
Sergeev S.M.	169
Sergeeva T.I	164
Storozhev V.I	116
Thai Phuong Truc	176
Vikrest A.U	
Vorobiev A.A	191
Ziong Minh Hai	116

## **Contents**

Preface	3
Afanasyev V.V., Blagiy V.A. Methods of offline handwriting recognition 104 Barabanova I.A. Analysis of the three-tier client-server architecture	
Baranov I.Y., Fedosov A.S. Project development justification of the remote workplace of the head of the situational center, taking info account the effe	
of teleprezence	
Bolnokin V.E., Storozhev V.I., Ziong Minh Hai. Analysis of the model of a flat	
hydroacoustic screen with a periodic system of internal tunneling radially	
inhomogeneous cylindrical inclusions	
Dzhevaga K.A., Izotova T.Yu. Peculiarities of simulation structure and operatio processes in access networks	
Karamihova O.V., Belonozhko E.D. The questions of efficiency the digital imag	ge
processing systems	
Lapko A., Orlov A., Davydov V. The automated system developing of the librar fund conducting	•
Mironov O.U., Kuchuk G.G., Vikrest A.U. Features of real time data flow contr	
in telecommunication systems13	
Naletov P.A., Kravets O.Ja. To a numerical study of the connection between the	,
degree and the possibility of a connection in the topology of a non-scalar	
internet network13	
Nguyen Thi Hien. On periodic input and output of the hysteresis relay starting	
from the moment of infinity15	
Popov S.V. About some logical problems	4
Ryabokon' V.V., Kutsakin M.A., Mironov O.U. Experimental study of the	_
identification method of binary data arrays	0
Sergeev M.Yu., Sergeeva T.I. Automated control systems for specialized	
educational and reference complexes	
Sergeev S.M. Expansion of dea methodology on the multimodal conception for the 3PL	
Thai Phuong Truc. Theoretical foundations and implementation of moving tasks	
management in distributed intermodular interaction based on mixed priority strategies with class switching	
Vorobiev A.A., Makeev S.M., Grushevaya E.V., Mysin O.D. Rationale for the	Ŭ
selection of the model of bayesian networks of trust to process the large date in cloud systems	
Author's index19	
LIULIUI DIIIUVA	U

—
—


#### Scientific publication

# MODERN INFORMATIZATION PROBLEMS IN SIMULATION AND SOCIAL TECHNOLOGIES

### **Proceedings of the XXIII-th International Open Science Conference**

Issue is published in author's edition

Cover designed by Sofia A. Kravets

Assigned to print 11.01.2018. Format 60x84 1/16. CPP 6,3. Order 2018011102. Circulation 500.

Science Book Publishing House 17200 153rd Ave SE, Yelm, Washington, 98597 USA http://www.sbook.us/