

CONTENTS

Mathematical modeling

Minaev V.A., Korolev I.D., Petrova O.V., Ovcharenko I.O. Protection System Modelling of Multi-Channel Automated Complexes from DDoS-Attacks 3

Kryukovskij A.S., Bova Yu.I. Mathematical Modeling of the Unfolding Parameters of the Edge Catastrophe $K_{4,2}$ by Local Asymptotic Method 11

Minaev V.A., Korolev I.D., Kulish O.A., Mazin A.V. Model Studies of Fiber-Optical Communication Channels in Quantum Cryptographic Systems 19

Khabarov R.S., Lokhvitskij V.A. Efficiency Evaluation Model of Parallel Processing in Distributed Environment Using Split-Join Queue 26

Kib N.A., Lupanchuk V.Yu. Technique of Correction of the Current Status of the Mobile Technical System in a Priori Uncertain Environment 34

Polyakov V.T., Popchenko O.V., Tesla E.A., Nagornyyak M.A. Vertical Antenna with Two Sources 42

Control of complex systems

Nechaj A.A., Borisov A.A., Borisova Yu.I. Point Analysis of Remote Sensing Data Using the Python Programming Language 49

Nagovitsyn A.V., Voznyuk V.V., Nagovitsyna A.N. Technological Basis for the Creation of the Transformable Antennas of the Space Based Radio Systems 55

Melikov E.A. A Conceptual Approach to the Development of Logical-Linguistic Models for Catalytic Reforming Installation 61

Timofeeva N.E., Dmitrieva K.A. Comparative Analysis of Relational and NoSQL Models of Service Information Storage in Centralized Distributed Database 66

Makhov V.E., Borisov S.V., Shirobokov V.V., Zakutaev A.A. Layout for the Development of Software and Algorithmic Complex Control Objects Outer Space 75

Bessonov N.V. Development of the Concept Model of an Intellectual Prototype of Objects of Complex Virtual Social Systems 88

<i>Eromasova A., Tezadova F.M., Prokhorov A.V., Vecherskaya S.E.</i> Scaling in The Tasks of Management Optimization on the Example of Optimization of Sales Management of a Hotel Business	100
<i>Zolotarev O.V., Khakimova A.K., Charnin M.M.</i> Development of Methods of Intellectual Analysis of Scientific Publications for Monitoring the Priority Directions of Development of Preventive and Personalized Medicine	109
<i>Sapozhnikov G.P.</i> Reduction of the Variety of Indicators of Monitoring Evaluation of the Activity of Non-Commercial Educational Organization to Optimize the Resource Efficiency of its Operation	117
Computer science and engineering	
<i>Zakharov A.I., Bryakalov G.A., Chmykhova Ya.V.</i> The Technique for Assessing the Capabilities of the Computing Center Facilities Data Processing	124
<i>Pugachev I.N., Markelov G.Ya., Tormozov V.S.</i> Acceleration of the Algorithm of Detecting Vehicles on Satellite Images Using the Filtration Procedure Hypothesis	130
<i>Gladyshev A.I., Burov G.G.</i> Synthesis of Optimal Structure of Protection Mechanisms by Addressing the Problem of Appointments in the Neural Basis of the Hopfield Neural Network	139
<i>Gladyshev A.I., Evenko A.V., Gezon V.S., Zhukov A.O., Zakharov A.I., Prokhorov M.E., Davidovich Yu.A., Tuchin M.S.</i> Image Processing Method of the Sky to Identify Stars	147
<i>Recommendations for the authors</i>	159
<i>Information about authors</i>	161
<i>Contents</i>	167