

CONTENTS

Geodesy

ATTRIBUTE DATA MODELS

Sabin I. Ivanov7

DETERMINATION OF THE ANGULAR ACCURACY WHEN SETTING OUT THE CENTERS OF BRIDGE PIERS

Ani A. Stefanova14

STAGES IN THE DEVELOPMENT OF DIGITAL IMAGES

Velichka Hr. Peneva, Evgeni Gr. Stoykov24

ERRORS WHEN USING TELESCOPIC SURVEY STAFF IN GEOMETRIC LEVELING

Ivan D. Ivanov31

ANALYSIS AND COMPARISON OF GRAVITY ANOMALIES FROM THE GLOBAL GEOPOTENTIAL MODELS EGM 2008 AND EIGEN 6C4 WITH AVAILABLE GRAVITY ANOMALIES IN AN EXTREMELY MOUNTAINOUS REGION OF THE TERRITORY OF SOUTHWEST BULGARIA - RILA MOUNTAIN

Krasimira K. Kirilova40

COMPARATIVE ANALYSIS OF THE CADASTRAL AND SPECIALIZED MAPS AND REGISTERS

Andrey I. Ivanov, Mirem E. Niyazi-Yusuf47

SPECIALIZED MAPS AND REGISTERS – GENERAL APPROACHES TO THEIR CREATION

Mirem E. Niyazi-Yusuf55

INTEGRATION OF GNSS AND LASER SCANNING FOR IMPROVING THE ACCURACY OF LARGE-SCALE GEODETIC MAPS

Nigyar H. Yankova65

PRESENT TECHNIQUES FOR SPATIOTEMPORAL ANALYSIS OF EARTH DEFORMATIONS USING DINSAR AND GNSS

Vesela R. Petrova71

Engineering Logistics

BASIC STANDARD ELEMENTS IN LOGISTICS

Andrey I. Bogdanov, Pety Velcheva-Todorova83

THE ROLE OF REVERSE LOGISTICS IN SUSTAINABLE AGRICULTURE

Anton Y. Antonov88

SYSTEM FOR SHIFT OPTIMIZATION THROUGH COGNITIVE FATIGUE: AN INNOVATIVE APPROACH IN INDUSTRIAL ENGINEERING

Yordanka Yankova-Yordanova94

NEW DIGITAL TECHNOLOGIES: CHALLENGES AND OPPORTUNITIES	
Nikolay H. Yordanov, Yordanka Yankova-Yordanova	98

National security

CHALLENGES, EMERGING TRENDS, AND FUTURE DEVELOPMENT OF REAL-TIME GIS

Donika V. Dimanova, Zdravko Y. Kuzmanov	107
---	-----

CHALLENGES AND MEASURES FOR ADMINISTRATIVE SECURITY AT THE LOCAL LEVEL DURING THE INTRODUCTION OF THE EUROPEAN CURRENCY UNIT (EURO) IN BULGARIA

Iliana K. Simeonova	117
---------------------------	-----

CENTRALIZED AND DECENTRALIZED SECURITY MANAGEMENT MODELS: ORGANIZATIONAL CHOICE AND STRATEGIC APPLICABILITY

Tsvetelina I. Metodieva	129
-------------------------------	-----

CHALLENGES FACING MODERN MECHANICAL ENGINEERING APPLICATIONS IN THE CONTEXT OF INDUSTRY 4.0

Mariela L. Antonova, Stamen I. Antonov	134
--	-----

NATO'S ROLE IN A NON-MILITARY CRISIS

Mariela L. Antonova, Stamen I. Antonov	139
--	-----

Pedagogical Sciences

AN INNOVATIVE MODEL FOR FORMING FINANCIAL LITERACY

Denitsa P. Zagorcheva-Koycheva	148
--------------------------------------	-----

Communication and computer technologies

A COMPREHENSIVE METHODOLOGY FOR NETWORK ASSET IDENTIFICATION AND MAPPING

Petar Kr. Boyanov	158
-------------------------	-----

BYPASSING DEFENSES THROUGH HUMAN MANIPULATION USING REVERSE TCP CONNECTIONS AND CUSTOM PAYLOADS

Petar Kr. Boyanov	177
-------------------------	-----

EXPLAINING ARTIFICIAL INTELLIGENCE IN EDUCATION: APPROACHES TO INTEGRATION IN AUTOMATED INFORMATION SYSTEMS

Desislava N. Ivanova	194
----------------------------	-----

INDUSTRY 4.0+ AND THE FACTORY OF THE FUTURE: TOWARD INTELLIGENT, FLEXIBLE, AND SUSTAINABLE MANUFACTURING

Dragomir I. Vasilev	204
---------------------------	-----

MODEL ARCHITECTURE AND PERSPECTIVES OF FEDERATED LEARNING FOR SUSTAINABLE AGRICULTURE IN BULGARIA

Desislava N. Ivanova, Iliyana St. Ivanova	213
---	-----

**EVALUATION OF FORECASTING METHODS FOR PHOTOVOLTAIC SYSTEMS
IN TERMS OF ACCURACY AND COMPUTATIONAL REQUIREMENTS**

Iliyana St. Ivanova224

**DEVELOPMENT OF A COLOR PIXEL PROCESSING ALGORITHM FOR THE BIG
FIVE PERSONALITY TRAITS SELF-EVALUATION MODEL**

Valentin T. Atanasov233