

Conference Scientific Program
2020 Int'l Conf. on Information Technologies (InfoTech-2020)
IEEE Conference, Rec. # 49 733
Web site: infotech-bg.com

Thursday, 17th September 2020

09:30 **Conference Opening**

9:45-13:00 Section [A]: "Information Technologies"

Software Technologies and Programming

[A01] Recruitment Software Tools in Enhancing Human Resources Management Efficiency

Teodora Lazarova (Bulgaria)

Digital Signal Processing and Applications

[A02] A Method for Synthesis of Nearly Ideal Phase Manipulated Signals

Mihail Iliev, Borislav Bedzhev, Monika Bedzheva, Plamen Yanakiev (Bulgaria)

[A03] Genetic Algorithm for Synthesis of Binary Signals with Optimal Autocorrelation

Mihail Iliev, Nikolay Nikolov, Miroslav Dimitrov, Borislav Bedzhev (Bulgaria)

[A04] Application of Images Segmentation for Evaluation Structure of White Brined Cheese

Atanaska Bosakova-Ardenska, Peter Panayotov, Petya Boyanova, Evelina Pashova (Bulgaria)

Database Management Systems and Information Systems

[A05] HISTEX (HISTory EXerciser): An Overview

Dimitrios Liarokapis¹, Elizabeth O'Neil², Patrick O'Neil² (¹ Greece, ² USA)

[A06] Testing Concurrency in Database Still Matters

Dimitrios Liarokapis¹, Elizabeth O'Neil², Patrick O'Neil² (¹ Greece, ² USA)

Computational Social Science

[A07] Multiobjective Forecasting Model Based on the Interval Discrete Type-2 Fuzzy Sets and Genetic Algorithm

Liliya Anatolievna Demidova, Maksim Anatolievich Stepanov (Russian Federation)

[A08] Approach to the Analysis of the Multidimensional Time Series Based on the UMAP Algorithm in the Problems of the Complex Systems Proactive Maintenance

Liliya Anatolievna Demidova, Maksim Anatolievich Stepanov (Russian Federation)

Hypermedia, Multimedia and Social Media

[A09] A Sample Teaching Design of 'Water Conductivity' Unit

Anna Thysiadou, Sofoclis Christoforidis (Greece)

Visualization Methods and Techniques

[A10] **Monitoring Real Time the Arachthos River (Greece) Using a Web GIS Platform**
Petros Karvelis, Dimitris Salmas and Chrysostomos Stylios (Greece)

Augmented and Virtual Reality

[A11] **Building a Virtual Reality Fire Environment based on Fire Dynamic Simulator**
Mpesiana Tzani, Jeries Besharat, Vlasis Charalampous, Chrysostomos Stylios (Greece)

Health Informatics

[A12] **REBA Workplace Ergonomics using Kinect**
Gabriela Guadalupe Reyes-Zárate, Israel García Cavazos (México)

14:00-15:00 Section [B]: “Information Security”

Security Policy, Methods and Tools

[B01] **A Reliable Authentication Method for the Internet of Things Devices**
Arslan Gasanovich Mustafaev, Abdulhamid Yahayevich Buchaev (Russian Federation)

[B02] **Measuring the Optimal Information Security Complexity for Blockchain Operations**
Veselin Monev (Switzerland)

[B03] **Defining and Applying Information Security Goals for Blockchain Technology**
Veselin Monev (Switzerland)

[B04] **Organisational Information Security Maturity Assessment Based on ISO 27001 and ISO 27002**
Veselin Monev (Switzerland)

15:00-16:00 Section [C]: “Networking and Communication Technologies”

Cloud Computing (Cloud Services and Applications)

[C01] **How to Develop Cloud Computing Strategies in Wholesale Technology**
Andreas Pescholl (Germany)

Mobile Cloud Computing

[C02] **EHealth Communications at the Network Edge**
Ivaylo Atanasov, Aleksandar Nametkov, Evelina Pencheva (Bulgaria)

[C03] **Edge Based Mission Critical Session Control**
Evelina Pencheva, Denitsa Velkova, Ivaylo Atanasov (Bulgaria)

Internet of Things

[C04] **Some Security Problems and Aspects of the Industrial Internet of Things**
Georgi Tsochev (Bulgaria)

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09:30-13:00 Section [D]: “Intelligent Systems and Applications”
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Intelligent and Agent Systems

[D01] Regularization Methods for Neural Network Models and Logistic Regression Models in the Problem of Classifying Industrial Products into Homogeneous Batches

Vladimir N. Krutikov, Guzel Sh. Shkaberina, Elena M. Tovbis, Lev Al. Kazakovtsev
(Russian Federation)

[D02] Search Algorithms with Randomized Variable Neighborhoods for Solving Series of Clustering Problems

Ilnar Nasyrov, Mikhail Gudyma, Lev Kazakovtsev, Dmitry Stashkov (Russian Federation)

[D03] Information System Supporting the Management of a Flooding Crisis in the City of Prague

Leon J. M. Rothkrantz, Siska Fitriane (The Netherlands)

[D04] AmbiNet Modelling of Spatial Aspects of Things

St. Stoyanov, T. Glushkova, A. Stoyanova-Doycheva, E. Doychev (Bulgaria)

[D05] Deep Neural Networks in Collective Robotics Control

Vanya Dimitrova Markova, Ventseslav Kirilov Shopov (Bulgaria)

[D06] Deep Learning Approach for Identification of Non-linear Dynamic Systems

Vanya Dimitrova Markova, Ventseslav Kirilov Shopov (Bulgaria)

[D07] Path-planning for an Autonomous Mobile Robot with Chaotic Behaviour

Ventseslav Kirilov Shopov, Vanya Dimitrova Markova (Bulgaria)

[D08] Deep Reinforcement Learning Approach for Building of Autonomous Robots Formations

Vanya Dimitrova Markova, Ventseslav Kirilov Shopov (Bulgaria)

[D09] Artificial Intelligence in Renewable Energy Systems Based on Smart Energy House

Saiful Islam, Lukasz Rojek, Michael Hartmann, Goran Rafajlovski (Germany)

Knowledge-Based Applications

[D10] Experimental Framework and Graphical User Interface for Research in Bioinformatics: GRAY – Gene Rapid Analysis

Desislava Ivanova, Boris Nenchovski (Bulgaria)

[D11] Sentiment Analysis with Instagram Data

Pinar Kirci, Elanur Gulbak (Turkey)

Ontology and Semantic Web

[D12] Assessing Ontology Alignment Quality – Analysis and Recommendations

Tatyana Ivanova (Bulgaria)

[D13] Extending Ontology Alignment Evaluation Data Sets for Evaluation of Bulgarian Language – Labelled Ontology Alignment

Tatyana Ivanova (Bulgaria)

14:00-16:00 Section [E]: “Technologies for System Design & Investigation”*Automation of System Design and Research***[E01] Mathematical Modelling of a DC-DC Boost Converter with Index Matrices***Nikolay L. Hinov, Polya V. Gocheva, Valeri P. Gochev (Bulgaria)***[E02] Index Matrices Based Modelling of a DC-DC Buck Converter with PID Controller and GUI on It***Nikolay L. Hinov, Polya V. Gocheva, Valeri P. Gochev (Bulgaria)***[E03] Remote Access of a Greenhouse Automation***Pinar Kirci, Hakan Igdeli (Turkey)**Computer Architecture and Performance Evaluation***[E04] Performance Evaluation of Delta Networks Operating via Cut-Through Switching under Hotspot Traffic***Eleftherios Stergiou, Glavas Evripides, Spiridoula Margariti (Greece)**Computer Modelling and System Investigation***[E05] Functional Organization and Evaluation of Access Management System with Heterogeneous Resources***Radi Romansky, Irina Noninska (Bulgaria)**Embedded Systems***[E06] Some Analysis of the Timing Parameters in Real-time Embedded Systems***Iliya Georgiev, Ivo Georgiev (USA)**Testing, Diagnostic and System Reliability***[E07] Power Substations Reliability Evaluation Using Fuzzy Set Theory***Atanas Iliev, Natasha Dimishkovska (North Macedonia)**Power Systems – Automation and Control***[E08] Calculation of Starting and Breaking Times of Induction Motor Electric Drives for Different Mechanical Loads***Mihail Dugalovski¹, Goran Rafajlovski² (¹North Macedonia, ²Germany)***[E09] Unit Commitment of Distributed Energy Resources in Distribution Networks Using the Dynamic Programming Method***Natasha Dimishkovska, Atanas Iliev, Dimitar Dimitrov (North Macedonia)***16:15-16:30 Section [F]: “Technological Aspects of Privacy”***Privacy and Personal Data Protection***[F01] The Science of Design as a Methodology for Building Personal Information Management System***Tzanko Tzolov, Member of Commission for Personal Data Protection (Bulgaria)***16:30 Conference closing**

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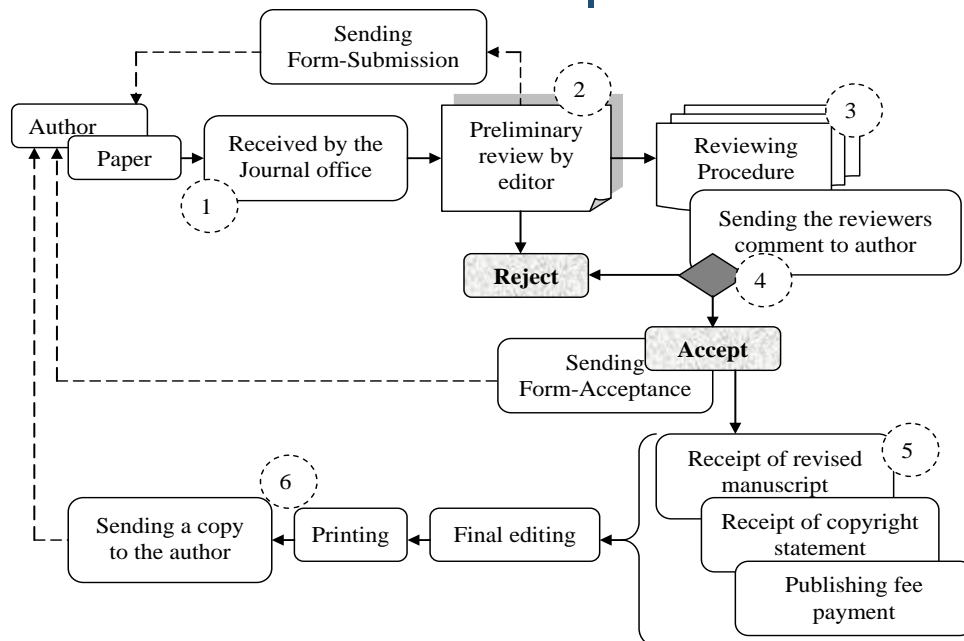
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Technical University of Sofia, 8 "St. Kliment Ohridski" Blvd, 1000 Sofia, Bulgaria

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