



XIII Balkan Conference on Operational Research

Belgrade, 25-28 May, 2018

XIII Balkan Conference on Operational Research

Final programme



PROGRAMME OVERVIEW

Friday, 25 May - University of Belgrade, Studentski trg 1, Belgrade				
15:00 – 16:30	BALCOR registration			
16:30 – 17:30	Room RA: Opening ceremony			
17:30 – 19:30	Room RA: Plenary session 1			
Saturday, 26 May - University of Belgrade, Studentski trg 1, Belgrade				
09:30 – 11:00	Parallel sessions			
	Room RB	Room RC	Room RD	
	B5	B12	B22 B14	
11:00 – 11:30	Coffee break			
11:30 – 13:30	Parallel sessions			
	Room RB	Room RC	Room RD	
	B13-1	B9	B2	
13:30 – 14:00	Room RB: Tutorial 1			
14:00	Excursion			
Sunday, 27 May - University of Belgrade, Studentski trg 1, Belgrade				
09:30 – 10:30	Room RA: Plenary session 2			
10:30 – 11:00	Coffee break			
11:00 – 12:30	Parallel sessions			
	Room RA	Room RB	Room RC	Room RD
	B11	B13-2	B8 B7	B1 B15
12:30 – 13:00	Room RB: SOLUTION'S PRESENTATION			
	Lunch break			
14:30 – 16:30	Parallel sessions			
	Room RB	Room RC	Room RD	
	B20	B7	B16	
16:30 – 17:00	Coffee break			
17:00 – 19:00	Parallel sessions			
	Room RB	Room RC	Room RD	
	B6 B10	B4 B21	B3-1	
20:30	Gala dinner			
	Closing ceremony			
Monday, 28 May - Mathematical institute, Kneza Mihaila 36, Belgrade				
09:30 – 10:30	Room M			
	B19 B18			
10:30 – 11:00	Coffee break			
11:00 – 12:30	Room M			
	B17 B3-2			
12:30 – 13:30	Room M: Tutorial 2			

TOPICS

B1	Banking & Financial Decision Making	B12	Mathematical Programming (Linear & Nonlinear Programming)
B2	Combinatorial Optimization & Integer Programming	B13	Multiple Criteria Decision Analysis & Multi-Objective Optimization
B3	Data Envelopment Analysis & Performance Measurement	B14	Network Optimization & Telecommunications
B4	Data Sciences & Big Data	B15	O.R. in Agriculture and Forest Management
B5	Decision Support Systems	B16	Operations Management
B6	Game Theory	B17	Optimization Software
B7	Heuristics, Metaheuristics & Nature Inspired Optimization Algorithms	B18	Project Management & Scheduling
B8	Locational Analysis	B19	Risk Analysis & Management
B9	Logistics & Supply Chain Management	B20	Statistics, Stochastics & Simulation
B10	Marketing & e-Business	B21	Structural Optimization
B11	Mathematical Modeling & Decision Making	B22	Traffic & Transportation

PLENARY SESSION 1

Oleg Khamisov, Russian Academy of Sciences (Russia) (chair: *Nenad Mladenović*)
Global Optimization with Nonlinear Support Functions

Leonidas Pitsoulis, Aristotle University of Thessaloniki (Greece) (chair: *Vera Kovačević Vujčić*)
Optimization in Robust Statistics

PLENARY SESSION 2

Panos Pardalos, Center for Applied Optimization (CAO) University of Florida (USA) (chair: *Nenad Mladenović*)
Objective Function Representation in Global Optimization and Applications

TUTORIAL 1

Damir N. Gainanov, Ural Federal University/ Moscow Aviation Institute (Russia) (chair: *Vera Kovačević Vujčić*)
Graph Theory and Combinatorial Optimization in the Applied Problems of the Freight Railway Transportations Management

TUTORIAL 2

Saïd Hanafi, University of Valenciennes (France) (chair: *Milorad Vidović*)
An Overview of Heuristics Based on Mathematical Programming for the 0–1 Mixed Integer Programming Problem

SOLUTION'S PRESENTATION

Andrijana Bačević, Nemanja Vilimonović, Igor Dabić, Jakov Petorivć, Darko Damjanović (chair: *Dragana Makajić Nikolić*)
INFORMS O.R. & Analytics Student Team Competition 2018, Fourth Prize

PARALLEL SESSIONS

09:30 – 11:00

Saturday, May 26

Room RB

Chair – Mirko Vujošević

B5 Decision Support Systems

Index Policies for Preventative Maintenance Tasks in Wind Farms

Jesus M. Pinar-Pérez, Diego Ruiz-Hernandez

Affects of Personality Traits on Decision Support Systems

Pinar Özkurt, Şahika Koyun Yılmaz, Meryem Ezgi Aslan, Vildan Özkur

One Method for Educational Management Based on Predict Further Orientation of the Students

Milan Ranđelović, Dragan Ranđelović, Kristijan Kuk

Data storage and representation for studying problems of prospective electric power systems

Ivan Trofimov, Leonid Trofimov, Sergei Podkvalnikov

Decision support system for product ranking based on sentiment analysis and MCDM under intuitionistic fuzzy environment

Sedef Çaltı, Şebnem Yılmaz Balaman

Uncertainty in Design and Management of Humanitarian Logistics Networks: A Literature Review

Şebnem Yılmaz Balaman, Melike Dirican

9:30 – 11:00

Saturday, May 26

Room RC

Chair – Vera Kovačević-Vujčić

B12 Mathematical Programming (Linear & Nonlinear Programming)

Minimization with coupled constraints, quasi-variational inequalities - solution methods

Milojica Jaćimović, Nevena Mijajlović

On a new method for generating random, optimal, linear optimization problems

Nikolaos Samaras, Angelo Sifaleras

Global Optimization : A new covering method combined with a stochastic local search

Ziadi Raouf, Bencherif-Madani Abdelatif

Primal-Dual Partitions in Linear Semi-Infinite Optimization

Maxim Ivanov Todorov, Abraham Barragan, Lidia Hernandez

An Efficient without Direct Function Evaluations Newton's Method for Solving Systems of Nonlinear Equations

Eleftheria Malihoutsaki, Theodoula Grapsa

A Linear Cost Model for 3d Printing Networks

Evgenia Fronimaki, Maria Mavri

An Initialization Strategy for Improving Newton's Method

Theodoula Grapsa

On the Extended Dimensionality of Simple Games

Xavier Molinero, Fabián Riquelme, Salvador Roura, Maria Serna

9:30 – 11:00

Saturday, May 26

Room RD

Chairs – Dušan Teodorović, Milorad Vidović

B22 Traffic & Transportation

User-Optimum Fuzzy Traffic Assignment Problem

Gizem Temelcan, Inci Albayrak, Hale Gonca Kocken

Airline profitability cycles: an undamped system model approach

Nemanja Mijovic, Milica Kalic, Jovana Kuljanin, Manuel Renold

Investigation of The Factors Affecting The Severity of Tramway Accidents in Eskisehir

Kadir Berkhan Akalin, Huseyin Onur Tezcan, Safak Bilgic

Evaluation of Traffic Perception with Robust Regression Analysis

Kadir Berkhan Akalin, Arzu Altin Yavuz, Murat Karacasu, Baris Ergul

A Bi-Level Airport Choice Model (Bacm) in a Multi-Airport Context. The Case of Rome.

Stefania Sinesi, Maria Giovanna Altieri, Mauro Dell'Orco

Modeling and Analysis of the U.S. airline market using a data-driven approach

Soheil Sibdari

The extended parking allocation model for connected vehicles

11:30 – 13:30

Saturday, May 26

Room RB

Chair – Milan Stanojević

B13-1 Multiple Criteria Decision Analysis & Multi-Objective Optimization

Multi-Criteria Decision Making for Smart Specialisation in Serbia

Duro Kutlača, Lazar Živković, Dijana Štrbac

On Finding a Pattern-Efficient Set of Non-Dominated Vectors to a Multi-Objective Optimization Problem

Bogdana Stanojević, Fred Glover

A Fuzzy Linear Programming Approach to Solve Bi-Level Multi-Objective Linear Programming Problems

Tunjo Perić, Zoran Babić, Sead Rešić

Analytical Network Process Approach for the Establishment of Industrial Symbiosis Network

Ezgi Şen, Banu Yüksel Özkaya

A Probabilistic Approach for Indirect Elicitation of the Preferences of a Decision Maker

Barbaros Yet, Ceren Tuncer Şakar

Forecasting the Accession of the Republic of Serbia to the European Union by Using the Analytic Network Process

Ana Krstić, Jovana Savić, Predrag Mimović

Applications of Renewable Energy Source Alternatives Prioritization: A Review

Irem Duzdar Argun, Baris Kantoglu

Occupational Health and Safety System Assessment for Manufacturing

Barış Kantoğlu, Irem Duzdar Argun, Serkan Sönmez

Sufficient Efficiency Criteria in Multiobjective Fractional Programming with Generalized (F,b,φ,p,θ)-Type I Univex n-set Functions

Andreea Madalina Rusu Stancu, I. M Stancu-Minasian

The MCDM Approach to the Selection of a Supplier for Medium Voltage Distribution Equipment

Sanja Puzović, Jasmina Vesić Vasović, Miroslav Radojičić, Vladan Paunović

Multiattribute Methods as a Means for Solving Ecological Problems in Water Resources - Lake Pollution

Milena Popović, Bisera Andrić Gušavac, Ana Katić

Data Processing for Sustainable Mining - Te-Ko Kostolac Open Pit Coal Mine Use Case

Nikola Zogović, Snežana Pantelić, Dragan Stošić

11:30 – 13:30

Saturday, May 26

Room RC

Chair – Milorad Vidović

B9 Logistics & Supply Chain Management

Containers Drayage Problem with Simultaneous Routing of Vehicles and Handling Equipment

Dražen Popović, Nenad Bjelić, Milorad Vidović

Evaluation and Selection of Manufacturing Companies Based on Fuzzy AHP and Fuzzy Topsis with the Interval Type-2 Fuzzy Sets

Nikola Komatina, Snežana Nestić, Danijela Tadić, Mirjana Misita

The Heterogeneous Fleet Vehicle Routing Problem with Light Loads and Overtime: Formulation and Population Variable

Neighbourhood Search with Adaptive Memory

Gábor Nagy, Lina Simeonova, Niaz Wassan, Said Salhi

Impact of Consumer preferences for remanufactured products

Deniz Ozdemir

A Literature Review Focus on Multi-Objective and Multi-Criteria Methods in Sustainable Supply Chain Management

Busra Nur Sahin

A Green Approach to the External Supply of Raw Materials: a Tabu Search-Based Algorithm

Juan Felipe Bermeo Losada

An Optimization of the In-Plant Milkrun System - A Case Study

Kadir Büyükköçkan, Şule İtr Satoğlu

Interpretation of Static Time-Continuous Inventory Model with Stock-Level Dependent Demand Rate and Variable Holding Cost as a Dynamic Discrete-Time System Control Process

Slobodan Antić, Lena Đorđević, Uroš Jeremić

Inventory Loading Problem with a Heterogeneous Vehicle Fleet

Ali Ekici, Turkey Umut Yilmaz

Forecasting Intermittent Demand by Using Parametric and Non-parametric Approaches and Inventory Implications
Merve Sahin

A Bi-Objective Approach to Locating Facilities in Solid Waste Management Systems
Branislava Ratković, Branka Dimitrijević, Vladimir Momčilović

An Approach to Locating Transfer Stations in Waste Management Systems
Milorad Vidović, Branislava Ratković, Nenad Bjelić, Dražen Popović

11:30 – 13:30

Saturday, May 26

Room RD

Chair – Mirjana Čangalović

B2 Combinatorial Optimization & Integer Programming

N-Fold Integer Programming
Shmuel Onn

Some static Roman domination numbers for flower snarks
Zoran Maksimović, Jozef Kratica, Aleksandar Savić, Milena Bogdanović

Application of Combinatorial Mathematics in Cryptography and Steganography
Muzafer Saračević

k-Metric Antidimension of Wheels and Grid Graphs
Mirjana Cangalovic, Vera Kovačević-Vučić, Jozef Kratica

The Usage of Local Search Operator in Genetic Algorithm: A Study on Vehicle Routing and Assignment Problems
Ozan Ridvan Aksu

A New Linear-Time Algorithm for Computing the Weak Roman Domination Number of a Block Graph
Marija Ivanović, Dragan Urošević

A Single Allocation (p-)Hub Location Problem under Fixed Markup Pricing
Dimitrije D. Čvokić

On the use of k-(Multi)Combination Decision Variables in Engineering Optimization Problems
Miloš Jevtić, Valentina Timčenko, Nikola Zogović, Borislav Đorđević

The Robust Location Routing Problem.
Theocharis Metzidakis, Panagiotis Repoussis, Manolis Kritikos, George Ioannou

Two-sided Estimate of the Maximum Independent Set of Vertices in an Undirected Graph
Damir Gainanov, Nenad Mladenovic, Varvara Rasskazova, Dragan Urošević

Exact values of the metric dimension of n-dimensional hypercube for up to n=13
Nebojša Nikolić, Mirjana Čangalović, Dušan Džamić

Symmetry Properties of Resolving Sets in Some Families of Graphs
Nada Mladenović, Vukašin Brković

Determining the Set of the Most Critical System Components - Optimization Approach
Petar Pavlović, Dragana Makajic-Nikolic, Mirko Vujosevic

11:00 – 12:30

Sunday, May 27

Room RA

Chair – Milan Stanojević

B11 Mathematical Modeling & Decision Making

Current review on Solution of Delay Differential Equations Using a Modified Power Series Method
Abiola Olanrewaju

A Solution Procedure for Interval Transportation Problems via Time-Cost Tradeoff
Gizem Temelcan, Mustafa Sivri, Inci Albayrak

A New Inventory Model for Instantaneous Deterioration and Obsolescent Pharmaceutical Items Under Delay in Payments
Najmeh Mostafaei, Abolfazl Mirzazadeh

Models of Analysis of Distribution of Passenger Traffics in Routed Transport Systems
Ainur Akhmediyarova, Maksat Kalimoldayev, Vladimir Yavorsky, Irbulat Utepbergenov

Conference scheduling: a personalized approach
Dries Goossens, Bart Vangerven, A.M.C. Ficker, Ward Passchyn, Frits Spijksma, Gerhard J. Woeginger

Operational research in private companies: Senior management view
Violeta Cvetkoska

Simple Evaluation of Ambient Temperature Effect on Electricity Production of Photovoltaic Power Plants
Saban Pusat, Mustafa Tahir Akkoyunlu, Hasan Hüseyin Erdem

Calculating the Optimal Release Time for Movies on Video-on-demand Websites
Sumanta Basu, Soumyakanti Chakraborty, Megha Sharma

Mathematical and information models of the evacuation task
Aliya Kalizhanova, Ainur Kozbakova, Zhazira Amirgaliyeva

System Maintenance Decision Making Based on Repair Rate Statistics
Nataša Kontrec, Stefan Panić, Milena Petrović

DEAHP Model Based on the Spectral Properties of Pairwise Comparison Matrix
Rade Lazović

11:00 – 12:30

Sunday, May 27

Room RB

Chair – Bogdana Stanojević

B13-2 Multiple Criteria Decision Analysis & Multi-Objective Optimization

Prioritization of Location Alternatives for Electric Vehicle Charging Stations in Istanbul
Melike Erdogan, Ali Karaşan, Ihsan Kaya

An entropy based group decision making model integrating ELECTRE and VIKOR under intuitionistic fuzzy environment
Sedef Çaltı, Şebnem Yılmaz Balaman

Analysis of the Cities in Private Hospital Investment: The Case of Turkey
Huseyin Avni Es

Classifying the Provinces of Turkey in Terms of Healthcare Indicators Via Gra-Tri
Huseyin Avni Es, Coskun Hamzacebi, Seniye Umit Oktay Firat

Electre III Approach as a Tool for Migration Problematic
Mladen Stamenković, Mihail Arandarenko, Salvatore Corrente, Maja Jandrić

On fuzzy solutions to a class of fuzzy multi-objective linear optimization problems
Bogdana Stanojevic, Milan Stanojević

Multi-Criteria Decision Making Methods: Does Approach Matter?
Nenad Medić, Zoran Anisic

11:00 – 12:30

Sunday, May 27

Room RC

Chairs – Zorica Stanimirović, Nenad Mladenović

B8 Locational Analysis

Sports Facility Location Planning with Customers' Preference
Jiun-Yu Yu, Ling-Chieh Kung

The Multi-period Design of Preventative Healthcare Networks
Soheil Davari

Models and Solution Methods for Finite Horizon Reliable Facility Location Problem
Megha Sharma, Sumanta Basu

B7 Heuristics, Metaheuristics & Nature Inspired Optimization Algorithms

Simulated Annealing For Multi Objective Vehicle Routing Problem with Alternative Links
İlknur Tükenmez, Onur Kaya

Vehicle Scheduling Problem in Sugar Beet Transportation: A General Variable Neighborhood Search Approach
Ana Anokić, Zorica Stanimirović, Tatjana Davidović, Đorđe Stakić

VNS-based Solution Approaches to the Maximal Covering Location Problem with Customer Preference Ordering
Lazar Mrkela, Zorica Stanimirović

Simple Use of Symbolic Regression Via Genetic Programming in the Prediction of Wind Speed
Saban Pusat, Mustafa Tahir Akkoyunlu, Ali Volkan Akkaya

11:00 – 12:30

Sunday, May 27

Room RD

Chairs – Gordana Savić, Milan Martić

B1 Banking & Financial Decision Making

The Impact of Presidential Tweeting and Connections on Companies' Stocks: The Case of Donald J. Trump
Riste Ichev

Investing in Emerging Markets: Contrasted Mean and Median Models in Egyptian Stock Markets
Mai Ibrahim, Mohammed El-Beltagy, Motaz Khorshid

Exploring the Critical Success Factors in the Banking Industry
Matilda Lopari

Analysis of Preference Towards Portfolio Selection Criteria
Marija Kuzmanović, Dragana Makajić-Nikolić

An Individual Credit Risk Assessment Framework By Interval Type-2 Trapezoidal Fuzzy-Ahp
Ertuğrul Ayyıldız, Alev Taşkın Gümüş, Merve Erkan

Variable Neighborhood Search for Cardinality Constrained Portfolio Optimization
Andrijana Bačević

B15 O.R. in Agriculture and Forest Management

Forest Policy Evaluation in European Countries Using the Promethee Method
Stefanos Tsiaras, Zacharoula Andreopoulou

Effective Pricing Strategies for Organic Agriculture Products Under the Community Supported Agriculture (CSA) Model
Nur Ayvaz-Cavdaroglu

Consumers' Attitudes Towards Products of Women's Cooperatives
Antonios Tiganis, Mando Dimitriadou, Maria Karaiskou, Antonios Avgeris

Analysis of Rationality in the Food Consumption by the Using Apriori Algorithm
Renata Benda-Prokeinova, Martina Hanova, Johana Paluchova

14:30 – 16:30

Sunday, May 27

Room RB

Chair – Milorad Stanojević, Božidar Radenković

B20 Statistics, Stochastics & Simulation

Limit distribution of the maximum of the sum of consecutive terms in random permutations
Lenka Glavaš, Jelena Jocković, Pavle Mladenović

An Active Learning-Based Metamodeling Technique for Agent-Based Simulation Models
Mert Edali, Gonenc Yucel

Simulation Analysis of Quality of Business in IP Networks
Vesna Radonjić Đogatović, Marko Đogatović, Milorad Stanojević

Simulation Model for Determining the Location of Runway Exit
Stefan Štjukić, Marko Đogatović, Bojana Mirković

A Survey of Industrial Engineering Students' Learning Types
Şahika Koyun Yılmaz, Meryem Ezgi Aslan, Vildan Özkır

Statistical Analysis of Cryptocurrencies
Galina Panayotova, George Dimitrov

Numerical Performance of Two Multilevel American Monte Carlo Methods
Hitoshi Inui, Katsumori Ano

On bivariate copula-based geometric models with application to reliability
Alessandro Barbiero

Simulation Analysis of Loading and Unloading Operations in Transport of Dangerous Goods in the Peak Months
Milorad Stefanović, Marko Đogatović, Maja Pejica, Milorad Stanojević

14:30 – 16:30

Sunday, May 27

Room RC

Chair – Nenad Mladenović, Katarina Vukadinović

B7 Heuristics, Metaheuristics & Nature Inspired Optimization Algorithms

A genetic algorithm for solving stochastic single machine scheduling problem
Feristah Ozcelik, Mehmet Ertem, Tugba Sarac

An Artificial Neural Network coupled with Genetic Algorithm to optimize biosurfactant production parameters
Tugba Sarac, Ahmet Sermet Anagun, Feristah Ozcelik, Pinar Aytar Celik, Yagmur Toptas, Busra Sener, Ahmet Cabuk

The impressive circular structures on the seabed as nature-inspired optimization
Mehmet Cem Catalbas, Arif Gulen

A Simulation-Based Optimization Approach for Sustainability in Multi-Construction Projects Environment
Areej Zaki, Hisham Abdelsalam, Ihab El-Khodary

E-Payment Systems Using Multi-Card Smart Card
Nenad Badovinac, Dejan Simić

A Novel Hybrid Approach for Multiple Sequence Alignment Problem
Lamiche Chaabane

Heuristics for the bipartite unconstrained 0-1 quadratic programming problem
Zhazira Amirgaliyeva, Nenad Mladenović, Raca Todosijević, Dragan Urošević

The New Supply Chain Models Under Evidence Theory by a Meta-Heuristic Algorithm for Pharmaceutical Items
Sahar Masoudi, A. Mirzazadeh

A Metaheuristic and Error Detection Approaches for Multiproduct EOQ-Based Inventory Control Problem
Slobodan Antić, Lena Đorđević

14:30 – 16:30

Sunday, May 27

Room RD

Chair – Mirko Vujošević

B16 Operations Management

Lean Six Sigma for Local Government: Overview of Online Publications
Engelbert Zefaj

Simheuristic Applications on Operations Management Related Problems
Nurcan Deniz

Behavioral Effects on Newsvendor Problem's Solution
Nurcan Deniz

A Brief Literature Analysis about Usage of the Fuzzy Sets and Markov Chain on Maintenance Processes
Melike Erdogan, Ihsan Kaya

Supplier Selection Problem in the Behavioral Operations Management Context
Nurcan Deniz

KPI Based Model for Improvement of Procurement Process Management
Teodora Rajković, Danica Lečić-Cvetković, Lena Đorđević, Zorana Mijalkov

A Mathematical Modeling Approach To Multiple Bin Packing Problem: An Application In Household Appliances Sector
Ertuğrul Ayyıldız, Alev Taşkın Gümüş, Anil Şen

An EOQ-based model for non-instantaneous deteriorating items with imperfect quality, delay in payments and time value of money
Mahvash Mahmoudinezhad, A. Mirzazadeh, Maryam Ghoreishi

Quality Losses as the Key Argument in the Public Procurement in Healthcare
Ivana Mijatović, Rade Lazović

17:00 – 19:00

Sunday, May 27

Room RB

Chair – Marija Kuzmanović

B6 Game Theory

Reciprocity in Groups: An Empirical Analysis in Greece
Antonios Avgeris, Panagiota Sergaki, Achilles Kontogiorgos, Antonios Tiganis

Cooperative games in fixed length arrays and the assignment problem
Josué Manzanarez Cárdenas, William Olvera – Lopez

Asymmetric Bargaining Power and Multi-Layered Coalition Structure
Haruo Imai

Modelling Problems Dynamics by Differential Games
Saltanat Amirgaliyeva, Valentin Ostapenko

B10 Marketing & e-Business

Social Media Marketing: An Empirical Analysis
Mehmet Cabir Akkoyunlu, Coşkun Özkan

The Effects of Social Media on Buying Behaviour
Mehmet Cabir Akkoyunlu, Coşkun Özkan

Advertisement Content Type at Digital Media Channels: A Case Study
Mehmet Cabir Akkoyunlu, Coşkun Özkan

Detection of Click Spamming in Mobile Advertising
Safiye Seyma Kaya, Burak Cavdaroglu, Kadir Soner Sensoy

17:00 – 19:00

Sunday, May 27

Room RC

Chair – Panos Pardalos

B4 Data Sciences & Big Data

Educating Industrial Engineering Students to Meet Market Needs: Which Elective Courses to Open?
Meryem Ezgi Aslan, Semih Önut, Şahika Koyun Yılmaz

Market Basket Analysis for Job Requirements
Meryem Ezgi Aslan, Semih Onut, Şahika Koyun Yılmaz

Quality measures of quantified linguistic summaries aggregated by the uninorm connective for dimensional data structures
Miroslav Hudec

The Effects of Climate Change on Bird Populations
Esra Sabancı, Meryem Ezgi Aslan, Şahika Koyun Yılmaz

Research and development of models for modular data processing systems of various classes and purposes
Gulnaz Nabyeva, Aliya Kalizhanova, Sultan Akhmetov, Lyazzat Balgabayeve, Timur Kartbayev, Aliya Doszhanova

Dichotomy Algorithms in the Multi-Class Problem of Pattern Recognition
Damir Gainanov, Nenad Mladenović, Dmitriy Berenov

A recommender system with IBA similarity measure
Nevena Vranić, Pavle Milošević, Ana Poledica, Bratislav Petrović

Improving decision making in ski resorts by analysing ski lift transportation
Boris Delibašić, Sandro Radovanović, Miloš Jovanović, Milija Suknović

B21 Structural Optimization

One approach for the group synthesis of recognition and classification tasks
Yedilkhan Amirgaliyev, Lyaillya Cherikbayeva, Konstantin Latuta, Vladimir Berikov, Maksat Kalimoldayev, Bekturgan Kalybek Uuly

17:00 – 19:00

Sunday, May 27

Room RD

Chair – Milan Martić

B3-1 Data Envelopment Analysis & Performance Measurement

A profile-based approach for ranking units using DEA cross-efficiency models
Amar Oukil

ArCo and New DEA-Like ArCo Technology Indices: How Different Methodologies Affect the Final Countries' Ranking?
Jovana Rakicević, Gordana Savić

A DEA Window Analysis for Assessing the Technical Efficiency of Agricultural Production in Northern Greece
Anna Kaliropoulou, Basil Manos

Measuring the Volume of Transport Using the BoD-CIDI Model: The Case of Europe
Milica Maričić, Marina Dobrota, Milica Bulajić, Veljko Jeremić

Intuitionistic fuzzy DEA/AR and its application to flexible manufacturing systems
Sanjeet Singh

The Efficiency Assessment of 'Smart' Performances and Quality of Life in CEE Cities
Jelena Stanković, Ivana Marjanović

Analyzing the Efficiency of Travel & Tourism in the European Union

Petra Barišić, Violeta Cvetkoska

Metrics, Indicators and Analytics to Support Government Excellence Programme: The Case of Dubai Government Website Excellence Model (WEM)

Hazza Al Nuaimi, Ozren Despić, Ali Emrouznejad

Technology-Based Critical Success Factors of Secondary Education Efficiency: A Cross-Country Analysis

Nemanja Milanović, Miloš Milosavljević, Gordana Savić

Assessment of Europeans NRENs Service Efficiency

Mara Bukvić, Gordana Savić

Teachers' Efficiency Measuring: An Application of DEA

Jovana Vukosavljević, Milena Popović, Milan Martić, Marina Popović

09:30 – 10:30

Monday, May 28

Room M

Chairs – Dragana Makajić-Nikolić, Mirjana Čangalović

B19 Risk Analysis & Management

A Model For Assessment of Risks with Trapezoidal Interval Type-2 Fuzzy Sets

Dajana Živković, Aleksandar Aleksić, Danijela Tadić, Aleksandar Đorđević

Competition, Risk and Learning in Electricity Markets

Danial Esmaili Aliabadi, Murat Kaya, Güvenç Şahin

Terrorism Risks Assessment of Tourism Destinations

Dragana Makajić-Nikolić, Marija Kuzmanović, Biljana Panić

Review of Forecasting and P2P Models in Electricity Trading

Minja Marinović

B18 Project Management & Scheduling

Energy Conscious Robot Scheduling in a Two-machine Cell

Sinan Gürel, Hakan Gültekin, Vahid Eghbal Akhlaghi

Maturity measurement system improvement in IT project management

Dragan Bjelica, Marko Mihić, Dejan Petrović

B14 Network Optimization & Telecommunications

Bounding cliques in a network by blocking edges

Foad Mahdavi Pajouh

11:00 – 12:30

Monday, May 28

Room M

Chairs – Milan Stanojević, Milan Martić

B17 Optimization Software

Unconstrained Numerical Optimization Application

Marko Miladinović, Predrag Živadinović

Benefits of Using Vagrant as a Test Environment

Zoran Ereiz, Miljan Vujadinović, Adel Handžić, Zanin Vežović

The Optimisation of Appropriate Flashing Pressure in Flash Geothermal Power Plants

Mustafa Tahir Akkoyunlu, Şaban Pusat, Mehmet Cabir Akkoyunlu, Mustafa Cenk Sarman

On Possible Cryptographic Optimization for Secure Mobile Application

Milan Marković, Goran Đorđević

Mathematica Blocks For Optimal Route Design

Kadir Berkhan Akalin, Hakan Ozbasaran

B3-2 Data Envelopment Analysis & Performance Measurement

Residential Attractiveness of Cities from the Perspective of the Efficiency, Residents' Perception and Preferences: The Case of Serbia

Marija Kuzmanović, Gordana Savić, Kristina Pajić

Interdomain Quality of Service Negotiation Using DEA Analysis and Petri Nets

Teodora Acimović, Gordana Savić, Dragana Makajić-Nikolić