International Conference on Science, Engineering Management and IT (SEMIT 2022)
Sep. 08-09 2022, Ankara, Virtual Event
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Room 1	Emine Nur Nacar, PhD(c) Research Assistant Ankara Yıldırım Beyazıt University	Join Zoom Meeting https://us02web.zoom.us/j/9542978480?pwd=QitQKzVKK2kxTkxLQUtMZXdvVnpDQT09
Room 2	Nurullah Güleç, PhD(c) Research Assistant Ankara Yıldırım Beyazıt University	Join Zoom Meeting https://us02web.zoom.us/j/6126609840?pwd=RG5kSjMrS2F4aS81NHoxaVJrdmI1Zz09
Room 3	Melda Kevser, PhD(c) Research Assistant Ankara Yıldırım Beyazıt University	Join Zoom Meeting https://us02web.zoom.us/j/5018457134?pwd=Ujh0T2JraExIaVRYZE44YzR5ZWYwdz09

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Date**: Thursday, 08.09.2022** Time: **8:30-10:10**		**Room 1**, link: https://us02web.zoom.us/j/9542978480?pwd=QitQKzVKK2kxTkxLQUtMZXdvVnpDQT09	
Opening Ceremony			
#	Title	Time	Duration (minutes)
1	Opening Presentation	8:30-8:35	5
2	Prof. Hasan Okuyucu Speech (Dean of Faculty of Engineering and Natural Sciences)	8:35-9:00	25
3	Clip: SEMIT 2022-Sep Summary Clip	9:00-9:05	5
4	Prof. Gerhard-Wilhelm Weber Speech	9:05-9:35	30
5	Clip: SEMIT 2022 Contributing Countries	9:35-9:40	5
6	Prof. A. Mirzazadeh Speech (Conference Chair)	9:40-10:05	25
7	Clip: IJSOM	10:05-10:10	5

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Date: **Thursday, 08.09.2022** Time:**10:15-11:15**	**Keynote Speech**	**Room 1**, link: https://us02web.zoom.us/j/9542978480?pwd=QitQKzVKK2kxTkxLQUtMZXdvVnpDQT09
Title: *"Public Transport for Smart Cities"*		
Keynote Speaker: **Prof. Janny M.Y. Leung** Choi Kai Yau College, The University of Macau, President of the International Federation of Operational Research Societies (IFORS)		

Abstract:

   The idea of a smart city is one that utilizes IoT technologies and data analytics to optimize the efficiency of city operations and services, so as to provide a high quality of life for its citizens. Therefore, public transport for a smart city should aim beyond the movement of people, to providing mobility for living. The growth of metropolitan areas in many countries into mega-cities have led to extreme traffic congestion in city centers and urban sprawl on their outskirts. In order to provide sufficient coverage/frequency, an integrated co-ordinated multi-modal public transportation system is needed, leading to substantial increase in operational complexity. Environmental concerns and the recent pandemic may also have changed work and commuting patterns in the future. For smart cities, public transportation must offer ubiquitous access, real-time response to demand, convenience and quality service, and energy-efficient operations. This talk will discuss the challenges in network design, operations planning, scheduling and management of smart public transportation systems.

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Date: **Thursday, 08.09.2022** Time:**11:15-12:00**	**Keynote Speech**	**Room 1**, link: https://us02web.zoom.us/j/9542978480?pwd=QitQKzVKK2kxTkxLQUtMZXdvVnpDQT09

Title:

"Optimal Control Computation for Nonlinear Time Delay Systems"

Keynote Speaker:
Prof. Kok Lay Teo
John Curtin Distinguished Emeritus Professor, Curtin University, Professor and Associate Dean (Research & Postgraduate Studies), Sunway University
Collaborators: **Changjun Yu, Chongyang Liu, Ryan Loxton, and Changzhi Wu**

Abstract:

Time-delay system is a type of dynamic system that depends not only on the current state and/or control but also on previous state and/or control. This phenomenon is encountered in various real-world situations. The control parameterization technique used in conjunction with the time scaling transform is an effective computational method for solving various optimal control problems. More specifically, the control parameterization method approximates the control function as a piecewise constant function with its heights and switching times as decision variables. The time scaling transform maps various time points into fixed time points in a new time horizon. However, time delays bring difficulties to time-scaling transformation when solving the time-delay optimal control problems. Although time- scaling transform technique maps the variable switching times into fixed time points in a new time horizon, it also transforms the fixed time delays defined in the original time horizon into variable delays in the new time horizon. Therefore, the time-scaling transformation technique fails to be applicable to solve the time-delay optimal control problem. In this talk, two generalized time scaling transforms will be discussed. The first transform is a hybrid time- scaling transform, which works by mapping the current state/control into a new time scale while the time-delay state/control still remain in the original time horizon. On this basis, variational method or co-state method can be used to derive the gradient formulas. Thus, gradient-based algorithms can be developed to solve the time-delay optimal control problems. However, the values of the delay state/control in the new time horizon can only be obtained by numerical interpolation. For the second transform, the explicit closed form expression for the variable delay in the new time horizon is derived, and hence is regarded as a complete version of the time scaling transform for time-delay optimal control problems. The gradient formulas of the objective and constraint functions can be derived based on variational method or costate method. A real-world practical example is solved so as to illustrate the effectiveness of the methods proposed.

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Date: **Thursday, 08.09.2022** Time: **10:15-12:00**	Session Code: **PS01**	Room 2, link: https://us02web.zoom.us/j/6126609840?pwd=RG5kSjMrS2F4aS81NHoxaVJrdmI1Zz09

Title:

"Leveraging Computational Intelligence for Sustainable Development"
"Artificial Intelligence Applications in Engineering"
"Engineering Optimization and Artificial Intelligence"

Panel Chairs:
Dr. Aybike Özyüksel Çiftçioğlu, Manisa Celal Bayar University, Turkey
Dr. Sanjib Biswas, Calcutta Business School, India
Dr. Samarjit Kar, National Institute of Technology, Durgapur, India
Dr. Fatma Ünal, Hitit University, Turkey

Paper Code	Authors	Paper Title
SEMIT-010	Çiğdem Sıcakyüz, Şeyma Önal	How do Turkish Companies approach Business Intelligence?
SEMIT-011	Fatma Unal, Batur Ercan	Luminescence Behavior of Fe3O4@Eu:58S Bioactive Glass
SEMIT-021	Sanjib Biswas, Neha Joshi, Samarjit Kar	A Novel Computational Framework for Comparing CSR
SEMIT-047	Servet Soygüder, İbrahim Berke Kaşikçi, Bilal Cansiz	The Effect of Use of PPE in the Construction Sector on Prevention of Occupational Accidents
SEMIT-1000	Rahmi Baki	Comparison of Innovation Performances of BRICS Countries through CRITIC and GRA Methods

Date: **Thursday, 08.09.2022** Time: **10:15-12:00**	Session Code: **PS02**	Room 3, link: https://us02web.zoom.us/j/5018457134?pwd=Ujh0T2JraExIaVRYZE44YzR5ZWYwdz09

Title:

" Economic, Social and Technology Factors Affecting Business and Social Sciences Aspects in Era of Industry 4.0"

Panel Chairs:
Dr. Dinh Tran Ngoc Huy, International University of Japan, Japan
Dr. Sylwia Gwoździewicz, Jacob Paradise University, Poland,
Dr Le Huong Hoa, The Police University hcm city Vietnam

Paper Code	Authors	Paper Title
SEMIT-1022	Dinh Tran Ngoc Huy	Analyzing Macro Influence on Beta Capm of Sacombank on Vietnam with Vector Autoregression (VAR) Model
SEMIT-1029	Dinh Tran Ngoc Huy	Deepening Analysis of Solutions for Better Risk Management Strategies of Listed Vietnam Banks by Using Econometric Model with Weighted Beta Formula
SEMIT-1046	Iryna Kramarenko; Irtyshcheva Inna; Marianna Stehnei; Boiko Yevheniia; Nadtochii Iryna; Matiiko Natalia; Hryshyna Nataliya; Ishchenko Olena	The Strategic Concept of Economic Development in the Focus of Design Management: National Features and International Experience
SEMIT-1056	Pham Van Tuan	Factors Affecting Farmers' Intention to Convert to Organic Agricultural Production – A Case Study in Hanoi, Vietnam
SEMIT-1074	Le Thi Diep Anh	Analysis of Effects of Tiktok Short-Video on Gen Z's Perceptions Toward Purchase Intention

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Date: **Thursday, 08.09.2022** Time:**12:30-14:00**	**Keynote Speech**	**Room 1**, link: https://us02web.zoom.us/j/9542978480?pwd=QitQKzVKK2kxTkxLQUtMZXdvVnpDQT09

Title:

"Public Logistics Networks for Home Delivery"

Keynote Speaker:
Prof. Michael G. Kay
Associate Professor, Fitts Department of Industrial and Systems Engineering, North Carolina State University, Raleigh, NC 27695-7906, USA

Abstract:
This talk will describe the design methodologies and protocol/mechanism specifications involved in developing a public logistics network that is able to facilitate low-cost deliveries to the home via the use of autonomous vehicles. The challenges and opportunities of this approach to home delivery are discussed, along with a discussion and relative cost comparison of different home delivery alternatives. A network design procedure is discussed that determines the number and location of distribution centers (DCs) in a metro area that best supports home delivery, along with a storage system control architecture for use inside of a DC and a mechanism to coordinate the operation of each vehicle in DC in the home delivery network. Finally, an estimate is provided of the likely cost for each delivery to the home.

Date: **Thursday, 08.09.2022** Time:**12:30-13:15**	**Workshop and paper session**	**Room 2**, link: https://us02web.zoom.us/j/6126609840?pwd=RG5kSjMrS2F4aS81NHoxaVJrdmI1Zz09

Title:

"Revamping Low Carbon Performance in the Green Practices for a sustainable Society: an Empirical Analysis"

Speaker:
Dr. Sadia Samar Ali
Associate Professor, King Abdul Aziz University, Jeddah 21589, Saudi Arabia

Abstract:
The present study focusses on evaluating the impact green practices on Low carbon performance which affects the Sustainable manufacturing and societies. So, the author proposed a theoretical model to evaluate the proposed hypotheses for the given study. To test, the theoretical model, a survey was conducted using the modified Dillman's approach. The data was collected from the manufacturer and 380 useable responses were obtained. Using the collected data, the measurement model was tested in the PLS-SEM package. The validity and reliability ensured the data is appropriate and can be used for further analysis. From, the structural model analysis, the authors found that proposed hypotheses are found to significant and support the theoretical model. However, in order to check the robustness of the proposed model, Machine Learning (ML) classifiers were used to test the hypotheses proposed in the study. Different ML classifiers were used and found ANN classifiers is apt for the study. Further it was found that hypotheses were valid with overall accuracy of 92.68% with an error value of 0.25. Moreover, the distinctness of the Regulatory Framework (RF) and LCP (Low Carbon Performance) were not widely observed. Therefore, a post hoc analysis was conducted to check the usability of the RF and LCP using the Item Response Theory (IRT) and found that RF and LCP are appropriate for the study. The present study is unique in terms of testing the theoretical model with different ML classifiers. Further, scale validation was carried out with the IRT to validate the efficacy of the proposed model.

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Date: **Thursday, 08.09.2022** Time: **13:15- 14**	Session Code: **PS03**	**Room 2**, link: https://us02web.zoom.us/j/6126609840?pwd=RG5kSjMrS2F4aS81NHoxaVJrdmI1Zz09
Title: **" Sustainable Logistics and Transportation under Uncertain Environments"**		
Panel Chair: **Prof. Dr. Sankar Kumar Roy,** Department of Applied Mathematics with Oceanology and Computer Programming. Vidyasagar University, Midnapore-721102, West Bengal, India.		

Paper Code	Authors	Paper Title
SEMIT-1020	Marianna Stehnei; Irtyshcheva Inna; Iryna Kramarenko; Boiko Yevheniia; Nadtochiy Iryna; Sirenko Ihor; Hryshyna Nataliya; Ishchenko Olena	Modeling and Forecasting the Post-war Economic Recovery of Ukraine&#039;s Transport Potential
SEMIT-1035	Marianna Stehnei; Irtyshcheva Inna; Iryna Kramarenko; Boiko Yevheniia; Nadtochiy Iryna; Sirenko Ihor; Hryshyna Nataliya; Ishchenko Olena	Methodical Approaches to Assessing the Regional Transport Potential of Ukraine: Modern Realities and Development Guidelines

Date: **Thursday, 08.09.2022** Time:**12:30-14**	Session Code: **PS04**	**Room 3**, link: https://us02web.zoom.us/j/5018457134?pwd=Ujh0T2JraExIaVRYZE44YzR5ZWYwdz09
Title: **"Recent Trends and Applications in Networks Communications"** **"Algebraic Tools with Cryptography"**		
Panel Chairs: **Dr. Serap Ergün,** Isparta University of Applied Sciences, Turkey **Dr. Barış Bülent Kırlar,** Süleyman Demirel University, Turkey		

Paper Code	Authors	Paper Title
SEMIT-008	ümit temel, Barış Bülent Kırlar	Karakteristiği 2 Olan Sonlu Cisimler Üzerinde Tanımlı 6. ve 7.
SEMIT-012	Tolga Yılmaz, Barış Bülent Kırlar	Karakteristiği 2 Olan Sonlu Cisimler Üzerinde Tanımlı Tek, İki ve Üç Terimli Permütasyon Polinomları
SEMIT-1010	Svetlana Rastvortseva	Assessing the Impact of Information and Communication Technology Implementation on Regional Economic Development and Growth
SEMIT-1015	Serap Ergün	Deep Reinforcement Learning at Scramble Intersections for Traffic Signal Control: An Example of Shibuya Crossing
SEMIT-1042	Ahmet Faruk DURSUN; Kübra Seyhan; Sedat Akleyley	End-to-End Encrypted Instant Message Application of Post-Quantum Secure Key Encapsulation Mechanisms for Mobile Applications

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Date: **Thursday, 08.09.2022** Time:**14:15-16:15**	**Workshop**	**Room 1**, link: https://us02web.zoom.us/j/9542978480?pwd=QitQKzVKK2kxTkxLQUtMZXdvVnpDQT09

Title:
" Approximation Methods under uncertain environments"

Speakers:

Prof. Souhail Dhouib

OLID laboratory, higher institute of industrial management, university of SFAX, Tunisia, former vice president of Tunisian operational research society

Prof. Taicir Moalla Loukil
MODILS laboratory, faculty of management and economic sciences, university of SFAX, Tunisia, president of the Tunisian operational research society

Abstract:

Generally, the approximation methods (Heuristics and Metaheuristics) provide a solution for complex problems in a polynomial computational time. These methods are basically developed for certain environment with crisp data. However, in real live data of industrial problems are generally presented under fuzzy, intuitionistic or neutrosophic environments.
In this workshop we will discuss about the enhancement of existent optimization methods for combinatorial problems (Scheduling Problem, Knapsack Problem, Shortest Path Problem, Transportation Problem, etc.) or continuous problems (Engineering Design Problem, etc.) under fuzzy, intuitionistic or neutrosophic domains. Real world application with step by step explication will be highly appreciated..

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Date: **Thursday, 08.09.2022** Time:**14:15-16:15**	Session Code: **PS05**	Room 2, link: https://us02web.zoom.us/j/6126609840?pwd=RG5kSjMrS2F4aS81NHoxaVJrdmI1Zz09
Title: **"Recent Advances of Circular Economy and Sustainable Development in Supply Chain Management"**		
Panel Chair: **Dr. Mustapha Oudani**, International University of Rabat, Morocco		

Paper Code	Authors	Paper Title
SEMIT-040	Ibaaz Khalid, Mustapha Oudani, Cherkaoui Mouhamed, El Harraki Imad	Automated Pinch-Exergy analysis for processes industries: ΔTmin effect on energy and exergy targets
SEMIT-044	CHAYMAE MAKRI, Said Guedira, Imad El Harraki, Soumia El Hani	Predicting the energy demand in the case of an industrial sector using a deep learning model
SEMIT-1008	Oumaima Zarhaoui	Joint Supplier selection and facility location problem
SEMIT-1053	Marianna Stehnei; Irtyshcheva Inna; Iryna Kramarenko; Boiko Yevheniia; Nadtochii Iryna; Sirenko Ihor; Hryshyna Nataliya; Ishchenko Olena	Methodical Approaches to the Assessment of Relationships Between the Parameters of the Transport Potential of Ukraine
SEMIT-1067	Gerçek Budak; Ece Çubukçu; Büşra Sırık	A Mathematical Model for Traffic Density Reduction Under Traffic Jam Solutions' Selection with Budget Constraint
SEMIT-1068	Bhaskar Tambi	Modified Trigger Quantity Model in Digital Kanban System

Date: **Thursday, 08.09.2022** Time:**14:15-16:15**	Session Code: **PS06**	Room 3, link: https://us02web.zoom.us/j/5018457134?pwd=Ujh0T2JraExIaVRYZE44YzR5ZWYwdz09
Title: **"Cyber Security and Cyber Resilience in Next-Generation Connected Supply Chain Networks"** **"Recent Advances of Circular Economy and Sustainable Development in Supply Chain Management"**		
Panel Chairs: **Dr. Alireza Goli,** University of Isfahan, Iran **Dr. Erfan Babaee Tirkolaee,** Istinye University, Turkey **Dr. Karim Zkik,** School of Engineers, France		

Paper Code	Authors	Paper Title
SEMIT-013	Doha Haloui, Kenza Oufaska, Mustapha Oudani, Khalid El Yassini	A multi-criteria decision making approach for the sustainable location of urban farms: Towards Farming 4.0
SEMIT-026	Yağmur Arıöz, Abdullah Yıldızbaşı	Evaluation of Circular Economy Strategies Based on the Process Management of Renewable Energy Technologies: A MCDM Approach
SEMIT-048	Faustino Taderera	Running logistics cargo centres in the Oman and Zimbabwe: the key performance indicators and fault lines
SEMIT-1028	Alireza Goli; Iman Shahsavani; Mahnaz Naghsh Nilchi	A Systematic Literature Review of Circular Economy Contributions Toward Sustainable Development
SEMIT-1060	Marliyah Marliyah; Budi Dharma	Integration of Risk Management in Indonesian Islamic Higher Education for Sustainability in Industry 4.0

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Date**: Thursday, 08.09.2022** Time: **16:30-18**	**Workshop**	**Room 1**, link: https://us02web.zoom.us/j/9542978480?pwd=QitQKzVKK2kxTkxLQUtMZXdvVnpDQT09

Title:

"Machine Learning: Select and Implement"

Speakers:
Prof. Safa Bhar Layeb
Professor of industrial engineering, member of the OASIS Lab, National Engineering School of Tunis, Tunisia.
Dr. Marwa Hasni
Assistant professor, Industrial Engineering, ISSIG Gabes, University of Gabes.

Abstract:

Machine learning is the science of programming machines to perform human tasks without being explicitly programmed to. Email spam recognition, spelling checkers, and platform video recommenders are commonly encountered machine learning applications that we are exploring in our everyday life. In this workshop, two learning objectives are targeted. First, acquire practice implementation of machine learning algorithms using Python. Second, give key criteria to help to select adequate machine learning algorithm given a particular case study.

For the purpose of the first objective, a comprehensive review of algorithms covering major machine learning models is provided. Afterwards, specified labs are animated using python. We propose the Simple Linear regression, the Multiple Linear regression and the Logistic regression to deal with the regression models. The Decision Tree, the Random Forest and the Naïve Bayes for classification models; and the K-means, the Nearest Neighbors (NN) and the Support Vector Machine (SVM) for the clustering ones.

To accomplish the second objective, we will introduce some popular use cases of Machine Learning and go through Machine Learning interview questions to assess practical market expectations.

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Date**: Thursday, 08.09.2022** Time: **16:30-18**	Session Code: **PS07**	**Room 2**, link: https://us02web.zoom.us/j/6126609840?pwd=RG5kSjMrS2F4aS81NHoxaVJrdmI1Zz09
Title: *"Analytical Decision Making "*		
Panel Chair: **Dr. Sita Ram Sharma,** Department of Applied Sciences, Chitkara University, Himachal Pradesh, India		

Paper Code	Authors	Paper Title
SEMIT-045	Madhu Gupta, Neha Kumra, Sita Ram	Pythagorean Tree type Fractals and more fractal designs
SEMIT-1002	Mehmet Kabak, Ahmet Aktas, Serhat Aydin, Claire Su-Yeon Park	A Mathematical Model for Staff Size Planning in Homecare Services
SEMIT-1024	Zekeriya Özkan; Duygu Aruğaslan Çinçin; Marat Akhmet	On Solutions of a Parabolic Partial Differential Equation of Neutral Type with Piecewise Continuous Time Delay
SEMIT-1047	Zülal Kenger; Ömer Nedim Kenger; Eren Özceylan	Analytic Hierarchy Process for Public Transportation: A Bibliometric and Social Network Analysis
SEMIT-1055	Aynura Poladova; Salih Tekin; Zulfiye Hanalioglu; Tahir Khaniyev	On Investigation of Stock Control Model Under the Assumption of Nonlinear Dependence

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Date: **Friday, 09.08.2022** Time: **9:00-09:45**	**Keynote Speech**	**Room 1**, link: https://us02web.zoom.us/j/9542978480?pwd=QitQKzVKK2kxTkxLQUtMZXdvVnpDQT09

Title:

"Energy-Efficient Scheduling in Robotic Manufacturing Cells"

Keynote Speaker:

Dr. Hakan Gultekin,

Department of Mechanical and Industrial Engineering, Department Postgarduate and Research Coordinator,

Sultan Qaboos University, Muscat, Oman

Abstract:

Industrial robots are widely used in factories, and their usage rates are still increasing rapidly every year. They are preferred for many reasons, such as increasing throughput rates, providing flexibility in production, and performing work that may be toxic or dangerous for workers or non-ergonomic. One of the most common uses of industrial robots is material handling. Production systems consisting of several machines and a robot responsible for loading and unloading these machines and transporting materials between them are called robotic cells.

In order to obtain maximum benefit from robotic cells, critical operational problems need to be solved. Among them, the sequencing of the jobs and the robot's movements are among the most important. On the other hand, robotic cells are systems with high energy consumption due to their structure. This talk will first define the classical operational problems in robotic cells. Later we will discuss the modelling of energy consumption of the robot with respect to its movement speed and the trade-off between the throughput rate and energy consumption. We will develop optimization models and solution procedures that consider this trade-off for robotic cells of different structures. The results compiled from various studies will show how much energy can be saved under different scenarios.

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Date: **Friday, 09.08.2022** Time: **9:45-10:30**	**Keynote Speech**	**Room 1**, link: https://us02web.zoom.us/j/9542978480?pwd=QitQKzVKK2kxTkxLQUtMZXdvVnpDQT09

Title:

"50 Years Limits of Growth, Management Science Challenges and Perspectives on Energy Security and Complex Resource Conflicts"

Keynote Speaker:

Prof. Stefan Pickl

Institute for Theoretical Computer Science, Mathematics and Operations Research at Universität der Bundeswehr München, Germany

Abstract:

2022 is a special year from different perspectives: Resource conflicts, security and climate-policy issues play an important role. This talk summarizes the history of more than 50 years Club of Rome and their important contribution "Limits of Growth" and presents special views from Management Science to complex resource conflicts and scenario-based decision making processes in context of energy security.

Different mathematical decision models and solution concepts are introduced. The TEM model is summarized and a game-theoretic extension is discussed. An algorithmic solution concept based on intelligent optimization techniques is derived. Some generalizations are characterized and discussed: Managerial Decision Making will be influenced in the future by certain developments of AI-based expert systems, machine learning techniques as well as different reinforcement learning approaches. Prescriptive analytics could be considered as an example how managerial decision making could be seen as a further application for control science and classical optimization in context of energy security and complex resource conflicts. May intelligent game theoretic solutions lead to sustainable solutions … ?.

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Date: **Friday, 09.08.2022** Time: **9:00-10:30**	Session Code: **PS08**	**Room 2**, link: https://us02web.zoom.us/j/6126609840?pwd=RG5kSjMrS2F4aS81NHoxaVJrdmI1Zz09

Title:

"Emerging Topics in Operations Research and Game Theory"

Panel Chair: **Prof. Sırma Zeynep Alparslan Gök,** Suleyman Demirel University, Turkey

Paper Code	Authors	Paper Title
SEMIT-1001	Medine Demir	Akran Grup Durumları ve Oyun Teorisi ile Modellenmesi Üzerine
SEMIT-1007	İsmail Özcan; Sırma Zeynep Alparslan Gök; Gerhard Wilhelm Weber	on the Core of Cooperative Grey Games Under Bubbly Uncertainty
SEMIT-1012	Pınar Usta; Nesibe Uysal	Shelter Site Selection after Natural Disasters.
SEMIT-1052	Cansu ÖZER; Serap Ergün; Sırma Zeynep Alparslan Gök	Uzay Enkazı Üzerine Matematiksel Bir Model
SEMIT-1066	Babek Erdebilli; Selcen Aslan Ozsahin	Multi-Layer Fuzzy Regression Models

Date: **Friday, 09.08.2022** Time: **9:00-10:30**	Session Code: **PS09**	**Room 3**, link: https://us02web.zoom.us/j/5018457134?pwd=Ujh0T2JraExIaVRYZE44YzR5ZWYwdz09

Title:

"Recent Trends and Practices of Machine Learning in Marketing and Operations Management"
"Technology in Marketing"

Panel Chairs:
Dr. Burçin Kaplan, Istanbul Aydin University, Turkey
Dr. Hamidreza Irani, University of Tehran, Iran

Paper Code	Authors	Paper Title
SEMIT-004	Hamid Reza Irani, Farhad Oghazian, Mostafa Esmaeili Mahyari, Mohammad Erfan Sobhani	Investigation on Content of online reviews created by hotel guests(Case: Iran)
SEMIT-007	Ugur Sener	Comparison of Machine Learning and Classical Statistical Forecasting Techniques with Turkish Electric Automobiles Demand Data
SEMIT-022	Burçin Kaplan	The Relationship between General Attitudes of Online Consumer Reviews, Purchasing Behavior in Social Media, Perception of Risk and Trust in Online Shopping: A Study with Machine Learning in R
SEMIT-1004	Aybike Özyüksel Çiftçioğlu	Machine Learning in Concrete Compressive Strength Classification
SEMIT-1016	Ahmet Koçak	An Analysis of AI and ML Systems of Most Valuable Automotive Brands in terms of Marketing Strategies

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Date: **Friday, 09.08.2022** Time: **10:45-11:30**	**Keynote Speech**	**Room 1**, link: https://us02web.zoom.us/j/9542978480?pwd=QitQKzVKK2kxTkxLQUtMZXdvVnpDQT09

Title:

"How Can We Mind the Gap Between Theory and Practice in Prescriptive Analytics?"

Keynote Speaker:

Prof. Bernardo Almada-Lobo

University of Porto, Faculty of Engineering, INESC-TEC

Abstract:

Most organizations already use to a certain extent effectively descriptive analytics to understand past events. Fewer attempts through predictive analytics the anticipation of scenarios and estimation of trends, and only a minority triggers great or clever recommendations based on prescriptive analytics. The necessary change of companies' mindset regarding the use of optimization models and business decision support systems, requires more than just appropriate technology, people and processes. It requires a proper change management.

In parallel, academic institutions must also lift the practical relevance of the research conducted in operations research and management science.

In this talk, we make use of a few successful and unsuccessful business analytics R&D projects related to operations management, as well as recent developments in prescriptive analytics, to draw some guidelines and best practices of this field.

Date: **Friday, 09.08.2022** Time: **11:30-12:30**	**Workshop**	**Room 1**, link: https://us02web.zoom.us/j/9542978480?pwd=QitQKzVKK2kxTkxLQUtMZXdvVnpDQT09

Title:

"Assessing the impact of information and communication technology implementation on regional economic development and growth"

Speaker:

Prof. Svetlana Rastvortseva

World Economy Department, Faculty of World Economy and International Affairs. University HSE, Russia

Abstract:

The positive impact of information and communication technologies (ICT) on economic development and growth in a country or region is beyond doubt. However, when conducting empirical tests based on different countries and regions of the world, this relationship looks ambiguous. The study uses two approaches, static and dynamic, represented by the Cobb-Douglas production function and the neoclassical growth model. The static approach assesses how the main components of ICT (fixed telephone subscriptions per 100 inhabitants, mobile cellular subscription per 100 inhabitants, fixed broadband subscription per 100 inhabitants, internet users as percentage of population) affect economic development (GDP or GRP per capita in the current period of time). The dynamic approach shows this impact on the rate of economic growth, i.e. in the long run. The object of the research is (1) 27 countries of the European Union during the period from 1960 to 2020, (2) 83 regions of Russia during the period from 2000 to 2019, but not before a particular technology implementation. The analysis has shown that ICTs have a permanent positive impact on economic development (both in EU countries and in Russia). At the same time, the impact of different types of technologies on economic growth is observed predominantly in the early stages of development and has a lag shift.

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Date: **Friday, 09.08.2022** Time: **10:45-12:30**	Session Code: **PS10**	**Room 2**, link: https://us02web.zoom.us/j/6126609840?pwd=RG5kSjMrS2F4aS81NHoxaVJrdmI1Zz09

Title:
"Sustainability"

Panel Chair: **Dr. Yavuz Selim Ozdemir,** Ankara Science University, Turkey

Paper Code	Authors	Paper Title
SEMIT-034	Tatapudi Gopikrishna Vasista	Environmental Impact Assessment In Green Building Construction Project Management For Sustainable Development
SEMIT-1017	Trung Tran; Anh Hai Le; Nghia Trong Ha	Management of Training and Fostering of Ethnic Minority Cadres in Vietnam
SEMIT-1045	Bekir Akıncı;	Using MCDM Approaches to Select a Cloud Computing Service Provider for a Bank Project
SEMIT-1063	Burcu Devrim İçtenbaş	Estimating Medical Waste Generation Utilizing Penalized Regression Models
SEMIT-1064	Oleksandr V. Dluhopolskyi	Research on marketing communication strategies of colleges and universities based on spatial and temporal distribution of students

Date: **Friday, 09.08.2022** Time: **10:45-12:30**	Session Code: **PS11**	**Room 3**, link: https://us02web.zoom.us/j/5018457134?pwd=Ujh0T2JraExIaVRYZE44YzR5ZWYwdz09

Title:
"Reliability and Safety Engineering, System Engineering and System Safety, Safety in Industry 4.0"

Panel Chair: **Dr Mazdak Khodadadi,** University of Science and Culture, Tehran, Iran

Paper Code	Authors	Paper Title
SEMIT-019	Mazdak Khodadadi-Karimvand, Hadi Shirouyehzad	Role of Functional Safety in Industry 4.0
SEMIT-020	Mazdak Khodadadi-Karimvand, Zahra Sojoudi, Hamidreza Zakeri	Prioritization of Critical Success Factors in Implementation of Safety Programs for Establishing Process Safety Management System, Using FAHP
SEMIT-023	Siamak Cheraghi, Mazdak Khodadadi-Karimvand	Developing and Implementation of Leading and Lagging Indicators in Process Safety Management at Oil & Gas Processing Industries: Case Study of Transferring Petroleum
SEMIT-1038	Mete Gündoğan; Selen Dilara Kirklar; Ömer Gençdoğmuş; Alp Eren Başsoy; Nurullah Güleç	Restructuring The Industry And Technology System
SEMIT-1054	Negar Afzali Behbahani	Propose a Safety Performance Assessment Framework for the Oil Well Drilling Industry's Sustainable Development Based on TOPSIS-FMEA and Human Factors

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Date: **Friday, 09.08.2022** Time: **13:30- 15**	**Workshop**	**Room 1**, link: https://us02web.zoom.us/j/9542978480?pwd=QitQKzVKK2kxTkxLQUtMZXdvVnpDQT09

Title: ***"Metaheuristics for Combinatorial Optimization Problems: from Design to Implementation"***

SPEAKERS:
Dr. Roya Soltani
Department of Industrial Engineering, Faculty of Engineering, Khatam University, Tehran, Iran
Dr. Shahla Paslar
Department of Industrial Engineering, Bandar Abbas Branch, Islamic Azad University, Bandar Abbas, Iran

Abstract:

Metaheuristics are general high-level procedures that coordinate simple heuristics and rules to find high-quality solutions to combinatorial optimization problems. Through this workshop, first metaheuristics and their building blocks are introduced so that the scholars and researchers will be able to learn the main concepts relevant for the design and implementation of metaheuristics for practical problems such as logistic and supply chains, transportation, telecommunications, vehicle routing and scheduling, manufacturing and production, timetabling, sports scheduling, facility location and layout, network design, power generation, finance, marketing, among others.
Finally, the essential steps for implementing a metaheusristic algorithm is described to solve a real world problem.

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Date: **Friday, 09.08.2022** Time: **13:30- 15**	Session Code: **PS12**	**Room 2**, link: https://us02web.zoom.us/j/6126609840?pwd=RG5kSjMrS2F4aS81NHoxaVJrdmI1Zz09

Title:
"Quality and Productivity Improvement"

Panel Chairs:
Prof. Josef Jablonsky, University of Economics and Business, Prague, Czech Republic
Mr. Dhritiman Chanda, Vishwakarma University, Pune, India

Paper Code	Authors	Paper Title
SEMIT-009	Serap Ergun	A network division based approach to the challenge of optimizing the allocation of evacuation centers
SEMIT-028	mounia rbiha, Karima Mialed	Is Motherhood a Motivational Factor for Moroccan Women Entrepreneurs ?
SEMIT-039	Melike Nur Tek, İrem Özkan, Melek İlarslan, Deniz Efendioğlu	A Survey on Quality Problems in SME's in Ankara: The Implementation of the 5S Methodology
SEMIT-051	Ergün Eraslan	Ergonomic Modifications to Reduce the Risk Scores in Production for Food Companies
SEMIT-1065	Shabnam Amirnezhad Barough; babek Erdebilli; Ergün Eraslan	Developing a GSS Model in the Automobile Manufacturing Industry Using the IFTOPSIS Method

Date: **Friday, 09.08.2022** Time: **13:30- 15**	Session Code: **PS13**	**Room 3**, link: https://us02web.zoom.us/j/5018457134?pwd=Ujh0T2JraExIaVRYZE44YzR5ZWYwdz09

Title:
"Other fields related to EM and IT"

Panel Chairs:
Dr. Ammar Odeh, Princess Sumaya University for Technology, Amman, Jordan
Dr. Yavuz Can, Friedrich-Alexander-University, Erlangen-Nuremberg, Germany

Paper Code	Authors	Paper Title
SEMIT-030	Yavuz Can	Representation of Orthogonality in a Boolean Cube
SEMIT-1003	Ammar Odeh; Ismail Mohammad; Mustafa Al-Fayoumi	Visual Object Tracking Using Machine learning
SEMIT-1043	Irtyshcheva Inna; Iryna Kramarenko; Boiko Yevheniia; Marianna Stehnei; Serbov Mykola; Sirenko Ihor; Hryshyna Nataliya; Ishchenko Olena	Problems of Water Supply in Wartime Conditions: Modeling, Forecasting, Solutions
SEMIT-1044	Mariem Miledi; Souhail Dhouib; Taicir Loukil	Novel Approach for Intuitionistic Octagonal Fuzzy Travelling Salesman Problem
SEMIT-1069	Rajae Elkazini; Benali Mohamed; Said Rifai	Industry 4.0 Technologies as Significant Strategy to Improve the Supply Chain Resilience

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Date**: Thursday, 09.08.2022** Time: **15:15-16:30**	**Room 1**, link: https://us02web.zoom.us/j/9542978480?pwd=QitQKzVKK2kxTkxLQUtMZXdvVnpDQT09		
	Closing Ceremony		
#	Title	Time	Duration (minutes)
1	Closing Presentation	15:15-15:20	5
2	Clip: SEMIT 2022	15:20-15:25	5
3	Dr. Ibrahim Yilmaz Speech (Conference Chair)	15:25-15:50	25
4	Countries Clip	15:50-15:55	5
5	SEMIT 2022 Special Issues	15:55-16:10	15
6	Appreciation	16:10-16:30	20