## 2013 5th International Conference on Modeling, Simulation and Applied Optimization

(ICMSAO 2013)

Hammamet, Tunisia 28 – 30 April 2013



**IEEE Catalog Number: ISBN:** 

CFP1376N-PRT 978-1-4673-5812-5

## **Table of Contents**

•	Process Optimum Design 1
	Abdelkader Mazouz
•	A two-stage technique to improve intrusion detection systems based on data mining 9
	algorithms
	Hachmi Fatma and Limam Mohamed
•	Influence of Capacity Variation to Regulate Voltage Quality for Doubly Fed Induction 15  Generator
	Yahia Saoudi, Nizar Derbel and Hsan Hadj Abdallah
•	Solving Resource-Constrained Project Scheduling Problem by A Genetic Local Search 19 Approach
	Olfa Dridi, Saoussen Krichen and Adel Guitouni
•	Steady-State and Dynamic Modeling of Asynchronous Back-To-Back High Voltage Direct 2
	Current Link With Voltage Source Converters
	Djehaf M, Zidi S-A, Khatir M, Hadjeri S and Djilani Kobibi Y
•	A Qualitative Modeling and Simulation Method Based on Cloud Model 30
	Chenxi Shao, Kelu Sun and Zhenzhong Shao
•	Optimal Control Approach Developed to Four-Wheel Active Steering Vehicles 35
	Imen Amdouni, Nafaa Jeddi and Lilia EL Amraoui
•	Modular Structural Analysis of Petri Nets for Distributed Causal Model-based Diagnosis 4:
	Hammadi Bennoui and Kamel Barkaoui

Benchmarking dynamic Bayesian network structure learning algorithms

47

Ghada Trabelsi, Philippe Leray and Mounir Ben Ayed

Proposing a new mathematical formulation for modeling costs in a p-hub center
 problem

Masoud Rabbani, Saeed Zameni and Seyed Mahmood Kazemi

Pseudo Bond graph Model of a Thermo-Hydraulic System 57
 Emna Aridhi, Mehdi Abbes and Abdelkader Mami

Development of Simulation-based optimization for controlling discharging operation of 62 gasoil

Nosaibeh Nosrati Ghods

- Neural Network Design Parameters for Forecasting Financial Time Series 67
   Assia Lasfer, Hazim El-Baz and Imran Zualkernan
- A new realistic modeling approach for two-echelon logistics network design 71
   Fatma Moalla, Racem Mellouli and Habib Chabchoub
- A clustering based simulated annealing approach for solving an un-capacitated single 77
   allocation p-hub location problem

Zeinab Rasoulinejad, Mahdi Bashiri and Masoud Mehrbanfar

- Multicriteria Fuzzy Clustering for Brain Image Segmentation 83
   Olfa Limam and Fouad Ben Abdelaziz
- A discrete artificial bee colony algorithm for resource-constrained project scheduling 88
   problem

Nouha Nouri, Saoussen Krichen and Talel Ladhari

- Active Control of Forced Vibrations in a Beam Via Maximum Principle 94
   Ismail Kucuk, Kenan Yildirim, The Late Ibrahim Sadek and Sarp Adali
- Optimal Power Flow with Emission Controlled using Firefly Algorithm
   98

- Ouafa Herbadji, Ketfi Nadhir, Linda Slimani and Tarek Bouktir
- A new Method for Improving Particle Swarm Optimization Algorithm (TriPSO) 104
   Mohammed Qais and Zeyad AbdulWahid
- Heuristics Approaches for the Industrial Storage Problem 110
   Salma Mezghani and Ahmed Frikha
- Manager's Preferences in the Bi-Objectives Bin Packing Problem 114
   Salma Mezghani, Habib Chabchoub and Belaïd Aouni
- Belief Hidden Markov Model for Speech Recognition 118
   Siwar Jendoubi, Boutheina Ben Yaghlane and Arnaud Martin
- Nonsmooth Newton's method for positive semi definite solution of nonlinear matrix 124
   equations
  - Boubakeur Benahmed, Khadra Nachi and Adnan Yassine
- Numerical Investigation of Hybrid FRP Rienforced Beams 128
   Abdullah Al-Rahmani and Farid H Abed
- Finite element simulations of the shear capacity of GFRP-reinforced concrete short 134
   beams
  - Farid H Abed, Abdullah Al-Rahmani and Ahmed H. Al-Rahmani
- Selecting Configuration Of Reverse Logistics Network Using Sustainability Indicators 139
   Soumaya Dhib, Taicir Loukil, Sid-Ali Addouche and Abderrahman El Mhamedi
- Arnoldi Model Reduction for Switched Linear systems 144
   Mohamed Kouki, Mehdi Abbes and Abdelkader Mami
- Particle Swarm Optimization based method for Bayesian Network Structure Learning 150
   Saoussen Aouay, Salma Jamoussi and Yassine Ben Ayed

- Optimizing the Performance of Complex Maintenance Systems 162
   Chefi Triki, Abdallah Alalawin and Gianpaolo Ghiani
- Cycle-Service-Level in Guaranteed-Service Supply Chains 168
   Ayse Sena Eruguz, Zied Jemai, Evren Sahin, Yves Dallery
- New lower bounds for the blocking flowshop scheduling problem to minimize the total 174
   completion time criterion
  - Said Toumi, Bassem Jarboui, Mansour Eddaly and Abdelwaheb Rebai
- The belief function theory within the framework of localizing an object 179
   Samah Yahia, Souhir Fterchi and Mohamed Nacer Abdelkrim
- Optimizing Cost and Quality of International Calls Routing Using Multi-Objective 183
   Optimization Techniques
  - Fouad Ben Abdelaziz and Samer El Gamal
- Performance of Tunisian enterprises integrating quality system, ERP (Enterprise 190
   Resource Planning) and SCM (Supply Chain Management)
  - Ismahene Aouadni and Abdelwaheb REBAI
- Inventory management with supplier selection problem: Supply uncertainty 194
   Sourour Aouadni and Abdelwaheb Rebai
- A consistent test for Unit Root against fractional alternative 199
   Ahmed BENSALMA
- A metaheuristic for solving the single-product/single-robot hoist scheduling problem 205
   under environmental costs
  - R. Ben Othmen, S. Hajri Gabbouj and T. Ladhari

Ketfi Nadhir, Djabali Chabane and Bouktir Tarek

Dyadic supply chains efficiency: A new theoretical framework to consider members
 power relationship and decision makers preferences

Walid Abdelfattah and Abdelwaheb Rebai

- A new modelling for p-hub median problem by considering flow-dependent costs 222
   Masoud Rabbani, Farhang Pakzad and Seyed Mahmood Kazemi
- Understanding soft evidence as probabilistic evidence : illustration with several use
   cases

Ali Ben Mrad, Véronique Delcroix, Sylvain Piechowiak, Mohamed Amine Maalej and Mohamed Abid

- Effect of Wastes on Changeover Time in Garment Industry 232
   Bessem Kordoghli and Ali Moussa
- A new web-based solver for Combinatorial Optimization Problems under Permutation 235
   Property

Lamia Trabelsi and Talel Ladhari

- A New Compression Framework: 'A-M' adaptive Code 241
   Ahmed Mokhtar, A.Mansour and M. A. Fouad
- Improvement Heuristic For Solving The One-Dimensional Bin-Packing Problem 246
   Sofiene Abidi, Saoussen Krichen, Enrique Alba and Juan M. Molina
- An iterated greedy heuristic for the static empty vehicle redistribution problem for the 251
   Personal Rapid Transit system

Ezzeddine Fatnassi, Olfa Chebbi and Jouhaina Chaouachi Siala

 Evaluation of different vehicle management strategies for the Personal Rapid Transit 256 System

Ezzeddine Fatnassi, Olfa Chebbi and Jouhaina Chaouachi Siala

• A particle swarm optimization for solving the one dimensional container loading 261 problem

Takwa Tlili, Sami Faiz and Saoussen Krichen

- Benchmarking chains of hardware retail stores in Canada 265 Pawoumodom M. Takouda and Mohamed Dia
- On the modeling of causal belief networks 271 Imen Boukhris, Zied Elouedi and Salem Benferhat
- Comparing Multi-Criteria Decision Aid Methods Through a Ranking Stability Index Mbarka Selmi, Tarek Kormi and Nizar Bel Hadj Ali
- Setting up the water balance simulation model WaSiM for the assessment of climate 282 change impacts in Chiba basin, Tunisia

Franz Hummel, Joachim Post, Günter Strunz, Ralf Ludwig, Annemarie Hoffmann and Sihem Benabdallah

- An Interactive Goal Programming Model Based on the Satisfaction Functions 288 Aouni Belaid, Martel Jean-Marc and Hassaïne Amal
- Solution to An Attack on Digital Signature in SMS Security 293 Neetesh Saxena, Narendra S. Chaudhari and Jaya Thomas
- Dynamic Group Transit Scheme for Corridor Transit Ondrej Vanek and Michal Pechoucek
- Nonlinear system identification of Hestersis-Backlash in Hammerstein models 305 Elayyan Elamari

- Fatigue crack initiation and vibration prediction life of turbine blade 316
   S. Lecheb, T.Djeddid, A.Chellil, A. Nour, M.Cherigui and H. Kebir
- Considering tributaries to reconstitute an extreme event on a portion of the Medjerda 322
   river

Abidi Sahar, Habaieb Hamadi and Hermassi Taoufik

- Linearized State-Space Model of the behavior of MR-Fluid Dampers 326
   A.H. ElSinawi, Ali Jhemi and Mohammad AlHamaydeh
- Adaptive Seismic Isolation of Structures Using MR-Fluid Dampers 331
   Ameen El Sinawi, Ali Al Jhemi and Mohammad AlHamaydeh
- Aeroelastic stability analysis of composite rotor blade 337
   A.Chellil, A.T.Settet, S.Lecheb, A.Nour, A.Yahiaoui and H.KEBIR
- Assessment of the SWAT model prediction uncertainty using the GLUE approach: A case 341 study of the Chiba catchment (Tunisia)

Haykel Sellami, Marnik Vanclooster, Sihem Benabdallah and Isabelle La Jeunesse

- Effect of the design moldboard on the tillage forces 347
   Ayadi Ibrahmi, Hatem Bentaher and Aref Maalej
- SCADA application of a Water Steam Cycle of a Thermal Power Plant 353
   Mohamed Najeh Lakhoua
- Behavior study of genetic operators for the minimum sum coloring problem 358
   Hend Bouziri and Olfa Harrabi
- A RBN-based recommender system architecture 364

- Mouna Ben Ishak, Nahla Ben Amor and Philippe Leray
- Solar Tower Plant Implementation in northern Algeria: Technico economic assessment 370
   'Salah Boudaoud, Abdallah Khellaf and Kamel Mohammedi
- Sustainable Supply Chains Optimization Mathematical Modeling Approach 376
   Amin Chaabane
- Design of a device for transferring power and data to a cochlear implant 382
   Kaoula Tayari, Mondher Chaoui, Mongi Lahiani and Hamadi Ghariani
- Verifying Web Services Substitutability Using Open Colored Nets Reduction Techniques 387
   Sofiane Bourouz and Nadia Zeghib
- Automatic Web Services Composition Using Maude Strategies 392
   Latreche Fateh, Sebih Hacene and Belala Faiza
- Dual-Top-Gated Graphene field-effect transistors to improve the subthreshold swing for 399
   digital applications
  - K. Tamersit, F. Djeffal, D. Arar and M. Meguellati
- An efficient Branch and Bound algorithm to solve the permutation flowshop scheduling 403
   problem with blocking constraints
  - Said Toumi, Bassem Jarboui, Mansour Eddaly and Abdelwaheb Rebai
- Genetic Local Search Algorithm for minimizing the total completion time in single 409
  machine scheduling problem with release dates and precedence constraints

  Ichraf Zaidi, Mehdi Mrad and Talel Ladhari
- Computation of Resource Circuits of Petri Nets by Using Binary Decision Diagrams 413
   YuFeng Chen, Ding Liu, GaiYun Liu and Kamel Barkaoui
- The Home Care Scheduling Problem: A modeling and solving issue 419
   Jaber Jemai, Marouen Chaieb and Khaled Mellouli

Ameen El-Sinawi, Hazim El-Baz and Noha Tarek Amer

Assessing the impacts of climate change in Mediterranean catchments under conditions
 431
 of data scarcity - The Gaza Case Study

David Gampe, Ralf Ludwig and Samir Afifi

Comparison of Green & Ampt and reservoir model effect on Rainfall-Runoff response 436
 (Study case: Skhira basin)

Hana Gharbi, Samah Chargui and Mohamed Slimani

- A multi-objective modeling of K-coverage problem under accuracy constraint 442
   Matthieu Le Berre, Faycal Hnaien and Hichem Snoussi
- An Optimization Tool for Intersection Design 448
   Nikiforos Stamatiadis, Adam Kirk and Nithin Agarwal
- Design and implementation of Direct Torque Control of Induction Machine on FPGA 453
   Soufien Gdaim, Abdellatif Mtibaa and Mohamed Faouzi Mimouni
- Data Hiding in Spatial Domain Image Using Chaotic Map 459
   Soumaya Zaghbani and Rhouma Rhouma
- Modelling a Unified Power Flow Controller for the Study of Power System Steady state 464
   and Dynamic Characteristics

Djilani Kobibi Youcef, Hadjeri Samir, Zidi Sid Ahmed and Djehaf Mohamed

- Using clustering for maintaining case based reasoning systems 470
   Abir Smiti and Zied Elouedi
- A MATLAB program for identifying the rainfall variability in rainfall-runoff modeling in
   Semi arid region (Merguellil basin: Central Tunisia)

- A PSO Algorithm for Economic Scheduling of Power System Incorporating Wind Based Generation
  - F. Benhamida, Y. Salhi, S. Souag, A. Graa, Y. Ramdani and A. Bendaoud
- A New Software for Power flow solution computing using LabVIEW Slimane Souag, Farid Benhamida, Fatima Zohra Gherbi and Amel Graa
- Measurements Uncertanity and Modeling Reliability of GaN HEMTs 494 Anwar Jarndal
- A Simplified Modelling Approach for AlGaN/GaN HEMTs Using Pinched Cold S-498 parameters

Anwar Jarndal

- On solving the bi-objective aircraft cargo loading problem 502 Nadia Dahmani and Saoussen Krichen
- Incremental Bayesian network structure learning in high dimensional domains 508 Amanuallah Yasin and Philippe Leray
- Genetic based Effective Column Generation for 1-D Cutting Stock Problem 514 Jaya Thomas, Narendra S. Chaudhari and Neetesh Saxena
- Linear Models for the Total Coverage Problem in Wireless Sensor Networks 519 Maher Rebai, Hichem Snoussi, lyes Khoukhi and Faicel Hnaien
- A Dynamic Approach for the Two-decision Maker Selection Problem with Group **Interviewing Options** 
  - Sihem Ben Jouida, Hajer Ben-Romdhane and Saoussen Krichen
- A heuristic for the network migration scheduling problem 529 Ali Balma, Nejib Hadj-Alouane and Atidel B. Hadj-Alouane

- An Efficient Character Recognition Scheme Based on K-Means Clustering 535
   Sajjad Pourmohammad, Reza Soosahabi and Anthony S. Maida
- A Fast New Method to Mitigate Amplifier-Induced ICI in OFDM systems Based on Predistortion in DFT Domain
  - Reza Soosahabi, Nasim Nasirian, Mort Naraghi-Pour and Magdy Bayoumi
- Complexity adaption of simulation models in a function-based modular framework
   546
   Florian Netter, Frank Gauterin and Chu Xu
- Vendor selection using Goal Programming with Satisfaction Functions 552
   Smaoui Soulef and Jedidi Hichem
- Numerical Investigation To Study Airfoil Efficiency In Plunging Motion 557
   Mohamed Mehdi Oueslati, Anouar Wajdi Dahmouni, Mohieddine Ben Salah and Sassi Ben Nasrallah
- Evaluation of qualitative possibilistic influence diagrams using strong junction trees 562
   Fatma Essghaier, Nahla Ben Amor and Hélène Fargier
- A new lower bound for minimising the total completion time in two-machine flow shop 568
   under release dates
  - Sabrine Chalghoumi, Mehdi Mrad and Talel Ladhari
- Generating maximal efficient faces for the multiobjective multicommodity flow problem 572
   Hela Masri, Saoussen Krichen and Adel Guitouni
- An Evaluation of the Risk Impact of Device Heterogeneity on Critical Care Delivery 577
   Mohamed Khedr Saad, Bilal Khan and Ghassen Ben Brahim
- Mixed Integer Lifted Cover Inequalities for knapsack problems with a single continuous 583
   variable
  - Pasqaule Avella, Sara Mattia and Maurizio Boccia

Maurizio Boccia, Giuseppe Bruno and Claudio Sterle

- Nonlinear Multivariate Statistical Process Monitoring of a Water Treatment Plant 593
   Khaled MENDACI, Messaoud RAMDANI and Toufik BENZARAA
- An arc flow model for the two stages variable size cutting stock problem 599
   Ines Meftehi and Mehdi Mrad
- Finite Element Modeling and Dynamic Simulation of Nonlinear VRM using MATLAB 603
   Tariq Benamimour, Amar Bentounsi, Hind Djeghloud, and Ilhem Bouchareb
- Modelling of Polyaniline for Wi-Fi electromagnetic interference shielding 608
   Whamid Al-Shabib and Stefan W. Lachowicz
- Effect of Driver & Vehicle Characteristics on Speeds at a Tangent Section of a Rural
   Highway in Jordan

Bashar Al-Omari, Ashraf Al-Ja'afari and Ghassan Abu-Lebdeh

A Genetic Algorithm for the Two-level Location Area Planning in Telecommunication 615
 Networks

Ons Abdelkhalek, Saoussen Krichen and Adel Guitouni

- Integrated Surface and Departure Management at Airports by Optimization 621
   Dag Kjenstad, Carlo Mannino, Patrick Schittekat and Morten Smedsrud
- Metaheuristic Algorithms Comparison for the LC Voltage Controlled Oscillators Optimal 626
   Design
  - P. Pereira, M. Kotti, H. Fino and M. Fakhfakh
- Iterated Local Search and Iterated Greedy Local Search for Two machines Permutation 632
   Flowshop Scheduling Problem with Time Lag

- Amdouni Hajer and Ladhari Talel
- Heuristics for Rich Profitable Tour Problems 636
   Rahma Lahyani, Khemakhem Mahdi and Frédéric Semet
- Simulating the effects of the passage of tractors on agricultural land 639 Elaoud, S. Chehaibi and K. Abrougui
- An optimised submicron Dual-Material gate (DM) GaAs-MESFETs design to improve the
   645
   analog performance using multi-objective computation
  - N. Lakhdar, F. Djeffal, D. Arar, M. Meguellati and T. Bendib
- Fuzzy relative importance of customer requirements in Improving Product Development 650
   F.Bencherif, L. H. Mouss and M. Meguellati
- Profile-based Sensitivity in the Design of Experiments for Parameter Precision 656
   Hana Sulieman
- On The Synthesis of digital two dimensional filters based on FIR filters approximation 660
   Amel B. H. Adamou-Mitiche, Lahcène Mitiche and Vasile Sima
- Combined optimization of shipping and storage costs in a multi-product and multi-level 666
   supply chain, under a stochastic demand
  - Tikito Kawtar, Achchab Said and Benadada Youssef
- Sharing demand forecasts in a basic supply chain using game theory 670
   Ilham SLIMANI and Said ACHCHAB
- A fuzzy stochastic goal programming approach for solving portfolio selection problem 674
   Laila Messaoudi and Abdelwaheb rebai
- K-Means clustering based on Gower Similarity Coefficient: A comparative study
   Bilel Ben Ali and Youssef Massmoudi
- Solving the Person-based Multitask Shift Generation Problem With Breaks

- Nico Kyngäs, Kimmo Nurmi and Jari Kyngäs
- Reliability estimation with Extrinsic and Intrinsic measure in belief function theory 692
   Ahmed Samet, Eric Lefèvre and Sadok Ben Yahia
- Vibration characterization using gaussian laser beam 698
   Naveed A. Abbasi, Taha Landolsi and Rached Dhaouadi
- A Variable Neighborhood Descent for solving the Single Machine Total Weighted 705
   Tardiness Problem
  - Hiba Yahyaoui, Saoussen Krichen, Bilel Derbel and El-Ghazali Talbi
- Solving the Steiner Tree Problem with Revenues, Budget and Hop Constraints to
   711
   optimality
  - Safa Bhar Layeb, Ines Hajri and Mohamed Haouari
- Multi Agent based Joint Production and Maintenance Scheduling Considering Human 715
   Resources
  - Sabrina Bouzidi-Hassini and Fatima Benbouzid-Sitayeb
- Implementation of a Hydrological modeling of groundwater recharge for the Chiba 720 catchment (Cap-Bon, Tunisia)
  - Asma Chemingui, Faten Horriche and Claudio Paniconi
- Peer-to-Peer Communication on Android-Based Mobile Devices: Middleware and
   Protocols
  - Waheb A. Jabbar, M. Ismail and R. Nordin
- Multi-Criteria Decision Support Systems: A Glorious History and a Promising Future 730
   Aouni Belaid and Jamil Razmak
- Existence and uniqueness of the inversion of a generalized Radon transform 739
   Rim Gouia-Zarrad

- ANFIS-based computation to study the nanoscale circuit including the hot-carrier and 74
   quantum confinment effects
  - T. Bentrcia, F. Djeffal, D. Arar and M. Meguellati
- An optimized GSDG MOSFET design for nanoscale circuit applications 746
   D. Arar, F. Djeffal, M. Meguellati and M. Chahdi
- Short-Term Wind Power Forecast for Economic Dispatch 750
   Fatemeh Marzbani, Ahmed Osman, Mohamed Hassan and Taha Landolsi
- Modeling of Solid Oxide Fuel Cells (SOFCs): An Overview 756
   Michael Lee, Gunhyung Park and Verica Radisavljevic-Gajic
- The three Statistical Control Charts using Ranked Set Sampling 762
   Mu'azu Ramat Abujiya and Muhammad Hisyam Lee
- Artificial Bee Colony Metaheuristic to Find Pareto Optimal Solutions Set for engineering 768
   design problems
  - Saïma Dhouib, Souhail Dhouib and Habib Chabchoub
- The Genetic algorithm with two-point crossover to solve the Resource-Constrained
   Project Scheduling Problems
  - Héla Ouerfelli and Abdelaziz Dammak
- Multi-Criteria Inventory Classification Problem: A consensus approach 776
   Imen Lajili, Talel Ladhari and M.Zied Babai
- New computational results with an exact knapsack separation procedure for structured 782
   Binary Integer Programming problems
  - Maurizio Boccia, Said Hanafi and Igor Vasilyev
- Logic-based Benders decomposition to solve the permutation flowshop scheduling
   problem with time lags

Imen Hamdi and Taïcir Loukil

- A Balanced Approach for Hazardous waste allocation problem 794
   Ines Kanoun, Youssef Masmoudi, Habib Chabchoub and Belaid Aouni
- Thermal Simulation Approach to the Cooling of a Power IGBT by Heat Pipes 800
   Améni Driss, Samah Maalej and Mohamed Chaker Zaghdoudi
- Numerical Analysis of Flows and Heat Transfer Within Grooved Flat Mini Heat Pipes 806
   Jed Mansouri, Samah Maalej, Mohamed Ben Hassine Sassi and Mohamed Chaker
   Zaghdoudi
- Simulation of air lift packed column 813
   Adel Oueslati, Ahmed Hannachi and Mohamed Elmaaoui
- Scenario Generation for Multi-objective Stochastic Portfolio Selection 818
   El Fayedh Rimeh, Ben Abdelaziz Fouad and Aouni Belaid
- Demand Responsive Transport Problem A new modelization of static case 824
   Manel Ayadi, Habib Chabchoub and Adnan Yassine
- Particle swarm optimization for support vector clustering "Separating hyperplane of 829
   unlabeled data"
  - Souad Chaabouni, Salma Jammoussi and Yassine Benayed
- Novel Modeling Paradigm For The Algal Production Of Biofuel 835
   Rohit Sharma, Avanish K Tiwari and G. Sanjay Kumar
- The inclusion interaction between an anti inflamatory with β-cyclodextrin 841
   Sahra Khalil, Dinar Karim and Kadri Mekki
- Behavior of compiled bases in compilation-based inference methods for min-based 845
   possibilistic networks
  - Raouia Ayachi, Nahla Ben Amor and Salem Benferhat

- Simulation docking of an anti-bacterial in β-cyclodextrin 851
   Dinar Karim, Sahra Khalil and Kadri Mekki
- Data Mining Techniques to Predict Protein Secondary Structures 855
   Sondès Fayech, Nadia Essoussi and Mohamed Limam
- Modeling of creep in GFRP RC Beams 860
   Abdelmonem Masmoudi, Mongi Ben Ouezdou and Mohamed Anouar BELDI
- On CPN-based Verification of Hierarchical Formalization of UML 2 Interaction Overview 865
   Diagrams
  - Aymen Louati, Chadlia Jerad and Kamel Barkaoui
- A classification approach to extract biological events 871
   Maha Amami, Rim Faiz and Aymen Elkhlifi
- The Embedded Control System through Real-Time Task 877
   Atef Gharbi, Mohamed Khalqui and Samir Ben Ahmed
- Sensitivity analysis of SWAT model to the spatial rainfall distribution and watershed 885 subdivision in streamflow simulations in the Mediterranean context: a case study in the Joumine watershed. Tunisia.
  - Jalel Aouissi, Sihem Benabdallah, Zohra Lili Chabaâne and Christophe Cudennec
- Equilibrium customers strategies in a single server M2/M/1 queue 891
   Fazia Rahmoune, Mohammed Said Radjef and Sofiane Ziani
- On one approach for solving of some class of Multiobjective optimization problems with 894
   interval coefficients
  - Sharif E. Guseynov and Sergey V. Drobyshev
- A Compilation based Approach to Inference in Dynamic Evidential Networks 902
   Laamri Wafa, Boutheina Ben Yaghlane and Christophe Simon

- Hestitant-Fuzzy-Promethee method 910
   Sonia Hajlaoui and Nesrin Halouani
- Imbricating Tasks in a Multichannel Contact Center 916
   Benjamin Legros, Oualid Jouini and Ger Koole
- A Formal Task Model for Flexible Workflows Systems 922
   Rim Hachicha

Chaaben Kouki, Zied Jemai, Evren Sahin and Yves Dallery

- Comparison Between Continuous Review Inventory Control Systems for Perishables 929
   With Deterministic Lifetime and Lead Time
- Effect of planned marina on Enfidha groundwater (Tunisia) A local-scale groundwater 935
- modeling
- A characterization of fuzzy strategy-proof Social Choice Functions 939

Faten Jarraya Horriche, Mounira Zammouri and Sihem Benabdallah

- Olfa Meddeb, Fouad Ben Abdelaziz and Jos Rui Figueira
- A Robust Detection and removal of beard from three dimensional human face
   944
   Dhahri Rokaya and Samir Belaid
- Modeling Historical Traffic Data using Artificial Neural Networks 949
   Mohammad S. Ghanim, Ghassan Abu-Lebdeh and Kamran Ahmed
- Microscopic Simulation Study of Transit Signal Priority Implementation Along an Arterial 953
   Corridor
  - Mohammad S. Ghanim, Ghassan Abu-Lebdeh and Kamran Ahmed
- The Impact of Mid-Block Crossing on Urban Arterial Operational Characteristics using 957
   Multimodal Microscopic Simulation Approach
  - Mohammad S. Ghanim and Sameer A. Abu-Eisheh

Informational market efficiency in GCC region: A comparative study between Islamic and conventional markets

Leila Gharbi and Khamoussi Halioui

• On the effectiveness of the coupling FEM-BEM approach for solving the elasto-plastic problems

Aour Benaoumeur, Boumaiza Daho and Khelil Fodhil

On parameters optimization of dynamic weighted majority algorithm based on Genetic 973 Algorithm

Dhouha Mejri, Mohamed Limam and Claus Weihs

- Selection of Pertinent Acoustic Features for Detection of Pathological Voices 979 Lotfi Salhi, Adnane Cherif
- Towards a multi\_agent system for manufacturing reconfiguration Wiem Mrabet and Talel Ladhari
- A multi-period supply chain design with product life cycle considerations 991 Besbes Khaoula, Loukil Taicir, Allaoui Hamid and Goncalves Gilles
- Do CEOs Personal Characteristics Matter on Transport Firm Value? a Stochastic Frontier Model

Ezzeddine Ben Mohamed, Sami Jarboui, Amel Baccar and Abdelfettah Bouri