



8th Int. Conf. on Metaheuristics and Nature Inspired Computing

Marrakech,

~~April, 5-8, 2021~~

Oct 27-30, 2021

META

META'2021

Program



META'21 is organized by

- University of Lille (Université Lille), France
- INRIA Lille Nord Europe, France
- GDR RO, GDR MACS, France
- EMI, Morocco

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Organizers



Program at glance

Time in Morocco is European Time - 1h.

October 27 Welcome and registration

Registration at 5* Palm Plaza Hotel lobby

October 28

Onsite & online

9h15 Morocco Time	<u>Opening</u> (Prof. E-G. Talbi)
9h30	<u>Session Optimization</u> (chair: Prof. F. Yalaoui)
10h50	Break
11h20	<u>Session Learning & Optimization</u> (chair: A. Nakib)
12h40	

October 29

Online and onsite

9h30	<u>Session Optimization</u> (chair: Prof. L. Amodeo)
10h30	Break
11h00	<u>Session Applications</u> (chair: Prof. R. Ellaia)
12h20	

October 30

Recorded video

Recorded presentations available on the website of the conference

Detailed program

Wednesday, October 27

10h - 12h – Registration

Morocco time

14h - 17h – Registration

Thursday, October 28

9h15 – 9h30 Opening Session – Prof. E-G. Talbi
Morocco time

9h30-10h50

Session – Combinatorial Optimization (chair: Prof. F. Yalaoui)

- Adaptive iterative destruction construction heuristic for the firefighters timetabling problem
Mohamed Amine Ouberouk, Jean-Paul Boufflet, Aziz Moukrim
- Energy-efficient buffer allocation : multi-objective study
Yasmine Alaouchiche, Farouk Yalaoui, Yassine Ouazene
- Hidden genes genetic algorithm applied to variable-sized design space optimal layout problems
Juliette GAMOT, Mathieu Balesdent, Arnault Tremolet, Romain Wuilbercq, Melab Noureddine, El-Ghazali Talbi
- ClusterTune : Tuning Metaheuristics Using Clustering for Scheduling Problems
Mohamed ElAmine Athmani, Taha Arbaoui, Farouk Yalaoui

10h50 – 11h20 – Coffee break

11h20 - 12h40

Session – Optimization & Machine learning (chair: A. Nakib)

- Genetic Algorithm for Neural Network Architecture optimization
Ayman Makki, Talbi EL Ghazali, Pascal Bouvry, Gregoire Danoy
- Multi-Infill Bayesian Optimisation for improving Exploration and Exploitation Trade-off
Jérémie Sadet, Franck Massa, El-Ghazali Talbi, Thierry Tison, Isabelle Turpin
- Optimization of deep neural network: Application to the forecast of energy consumption
Thomas Firmin, El-Ghazali Talbi, Sandra Claudel, Jean-Yves LUCAS
- Spiking Neural Networks and Audio Classification
Farah Medjahed, Philippe Devienne, Abou el hassane Benyamina

19h30 BANQUET Meeting @Hotel Palm Plaza Lobby

Friday, October 29

9h30-10h30

Session – Optimization (chair: Prof. L. Amodeo)

- Evaluating private social choice: particle swarm optimisation without panopticon
Vicenc Torra, Edgar Galvan
- Discrete PSO strategies for search in unit lattice of m-dimensional simplex
Marek Kvet, Jaroslav Janáček
- pyParadiseo : a Python-powered Framework for Metaheuristic Optimization
Jan Gmys, Nouredine Melab, El-Ghazali Talbi

10h30 – 11h – Coffee break

11h00 - 12h20

Session – Applications (chair: Prof. R. Ellaia)

- Sales forecasting with weather data using fuzzy natural logic
Tomas Tichy, Ales Kresta, Hana Dvorackova
 - Extended path-relinking method for p-location problem
Jaroslav Janáček, Marek Kvet
 - A Study on the Influence of Runtime Uncertainty in the Optimization of Software Programs
Jose Miguel Aragon-Jurado, Juan Carlos de la Torre, El-Ghazali Talbi, Bernabe Dorronsoro
 - The Construction of Uniformly Deployed Set of Feasible Solutions for the p-Location Problem
Peter Czimmermann
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Saturday, October 30

Recorded presentations available on the web site of the conference

- GA and ILS for optimizing the size of NFA models
Frédéric Lardeux, Eric Monfroy
- A Physarum-inspired approach for influence maximization
Gustavo Rodríguez-Gómez, Alvaro Lopez-Garcia, Aurelio López-López
- A Genetic Algorithm for a capacitated lot-sizing problem with lost sales, overtimes, and safety stock constraints
François Larroche, Odile Bellenguez, Guillaume Massonnet, Benoît Le Badezet
- A Large Neighborhood Search for a Cooperative Optimization Approach to Distribute Service Points in Mobility Applications
Thomas Jatschka, Tobias Rodemann, Günther Raidl
- A new strategy for collective energy self-consumption in the eco-industrial park : Mathematical modeling and economic evaluation
Hamza GRIBISS, Mohammad Mohsen AGHELJAD, Farouk Yalaoui
- Automatic generation of metaheuristic algorithms
Sergio Iturra, Carlos Contreras-Bolton, Victor Parada
- Evolutionary-based Optimization of Hardware Configurations for DNN on Edge GPUs
Halima Bouzidi, Hamza OUARNOUGHI, El-Ghazali Talbi, Abdessamad Ait El Cadi, Smail NIAR
- A New Learnheuristic: Binary SARSA - Sine Cosine Algorithm (BS-SCA)
Marcelo Becerra-Rozas, José Lemus-Romani, Broderick Crawford, Ricardo Soto, Felipe Cisternas-Caneo, Andrés Trujillo Embry, Máximo Arnao Molina, Diego Tapia, Mauricio Castillo, José-Miguel Rubio
- Biased Random-key Genetic Algorithm for the 2-Dimensional Guillotine Cutting Stock Problem with Stack Constraints
Marcos Vinícius Almeida Guimarães, Eduardo T. Bogue, Iago A. Carvalho, Thiago Noronha, Armando H. Pereira, Sebastián Urrutia
- Minimum Rule-Repair Algorithm for Supervised Learning Classifier Systems on Real-valued Classification Tasks
Koki Hamasaki, Masaya Nakata
- Multi-phase methodology for solving the multi depot vehicle routing problem with limited supply capacity at the depots
Javier de Prado, Sandro Moscatelli, Pedro Piñeyro, Libertad Tansini, Omar Viera
- Visualizing Crossover Rate Influence in Differential Evolution with Expected Fitness Improvement
Vladimir Stanovov, Shakhnaz Akhmedova, Eugene Semenkin
- Recovery-to-Efficiency: A New Robustness Concept for Multi-objective Optimization under Uncertainty
Raca Todosijevic, El-Ghazali Talbi
- Deep Learning and Multi-objective Optimization
Oumayma Bahri, Lionel Amodeo

- A discrete-time Markov Chain model for a healthcare periodic inventory system with stochastic demand, lost sales and required service level.
Saâdia Khoukhi
- Multi-Objective Optimization Approach under uncertainty for Workforce Routing and Scheduling Problem in Home Health Care
Mariem Belhor, Adnen EL-Amraoui, Abderrazak JEMAI, François DELMOTTE
- Analysis of Behavioural Differences in Experimental Trading Period with GUHA Method
Hana Dvorackova, Tomas Tichy, Petr Dvoracek
- Enhancing the Performance of Software Programs for Devices with Limited Computing Capacity
Carlos Benito-Jareño, Juan Carlos de la Torre, Pascal Bouvry, Bernabe Dorronsoro
- A review of the Electric School Bus Routing Problem
Hajar Bideq, Khaoula Ouaddi, Rachid Ellaia, Agnès Gorge
- Spiking Neural Networks and Audio Classification
Farah MEDJAHED, Philippe Devienne, Abou el hassane Benyamina

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Conference Place



Organizers

