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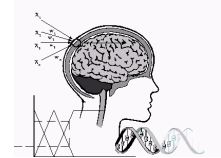
Innovation in Knowledge Based and Intelligent Engineering Systems
28th International Conference on Knowledge-Based and Intelligent Information & Engineering Systems (KES 2024)
11 - 13 September 2024
Silken Al-Andalus Palace, Seville, Spain

INVITED SESSION SUMMARY

Title of Session:
      Global and Constrained Optimization: Algorithms and Applications (5th Edition)

Name, Title and Affiliation of Chair:
Chair:
Prof. Abdellah Chehri
Department of Mathematics and Computer Science, Royal Military College of Canada, Kingston, Ontario, Canada. Email: **chehri@rmc.ca**

Co-Chaired by:
Prof. Sara Ségui
Department of Mathematics and Computer Science, University of Quebec in Chicoutimi, UQAC, Chicoutimi, Québec, Canada. Email: **sara_seguin@uqac.ca**

Prof. Francois Rivest
Department of Mathematics and Computer Science, Royal Military College of Canada, Kingston, Ontario, Canada. Email: **Francois.Rivest@rmcc-cmrc.ca**

Prof. Imran Ahmed
Anglia Ruskin University Cambridge, East Road, Cambridge, UK. Email: **imran.ahmed@aru.ac.uk**

Details of Session (including aim and scope):
Many scientists, mathematicians, and engineers want to find optimal solutions to their particular problems. Optimization techniques have become important and widely used in industry and science. With the emergence of large-scale networks and complex systems, significant research activity has occurred in the area of global optimization in recent years. Many new theoretical, algorithmic, and computational contributions have resulted. The primary aim of these works is to design numerical methods that attain global and fast local convergence guarantees.

The proposed special session aims to bring together new theories and applications of global and constrained optimization techniques to the data mining, internet/telecommunication, network utility maximization, medical applications, multimedia, computational finance, social network analysis, predictive control (industry 4.0), image, and signal processing problems.

The topics of interest include, but are not limited to:
- Global Minimum Point
- Equality Constrained Nonlinear Optimization Problems
- Large-Scale Optimization
- Engineering design optimization
- Distributed Constrained Optimization Method
- Linear Programming Problem
- Binary Quadratic Optimization
- Bayesian Constrained Optimization Approach
- Cooperative and Parallel Optimization
- Game Theory Concept
- Scheduling Algorithms
- Graph-Based Data Mining
- Stochastic Population-Based Optimization Algorithm
- Heuristic Methods

Important deadlines
- – Submission deadline: TBD
- – Acceptance/Reject notification: TBD
- – Camera-ready: TBD
- – Author Registration: TBD

Submission

Each submission should be at most 10 pages in total including bibliography and well-marked appendices and must follow the Procedia proceedings format.

Submissions for the conference must be made as complete papers (there is no abstract submission stage) submitted as PDF documents through the **PROSE online submission and review system.**

Publication

Authors who submit and present their work will have their work published and indexed internationally by Elsevier's Procedia Computer Science **(http://www.journals.elsevier.com/procedia-computer-science/**)

Website URL of Call for Papers (if any):

Conference: http://kes2024.kesinternational.org/

Sessions: http://kes2024.kesinternational.org/cmsISdisplay.php

Website URL of Call for Papers (if any):

Email & Contact Details:

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