

Table of Contents

International Journal of Swarm Intelligence Research

Volume 10 • Issue 4 • October-December-2019 • ISSN: 1947-9263 • eISSN: 1947-9271

An official publication of the Information Resources Management Association

Special Issue on Bio Inspired and Soft Computing Methods for Solving Time Series Problems

Guest Editorial Preface

vi Habib Shah, College of Computer Science, Department of Computer Science, King Khalid University, Abha, Saudi Arabia

Research Articles

- 1 **A Permutation-Based Bees Algorithm for Solving Resource-Constrained Project Scheduling Problem**
Mohamed Amine Nemnich, Department of Computer Science, University Mustapha Stambouli of Mascara, Mascara, Algeria
Fatima Debbat, Department of Computer Science, University Mustapha Stambouli of Mascara, Mascara, Algeria
Mohamed Slimane, Université de Tours, Laboratoire d'Informatique Fondamentale et Appliquée de Tours (LIFAT), Tours, France
- 25 **Predicting Crude Oil Price Using Fuzzy Rough Set and Bio-Inspired Negative Selection Algorithm**
Ayodele Lasisi, Faculty of Computer Science and Information Technology, Universiti Tun Hussein Onn Malaysia, Johor, Malaysia
Nasser Tairan, College of Computer Science, King Khalid University, Abha, Kingdom of Saudi Arabia
Rozaida Ghazali, Faculty of Computer Science and Information Technology, Universiti Tun Hussein Onn Malaysia, Johor, Malaysia
Wali Khan Mashwani, Department of Mathematics, Kohat University of Science and Technology, Kohat, Pakistan
Sultan Noman Qasem, Computer Science Department, College of Computer and Information Sciences, Al Imam Mohammad Ibn Saud Islamic University (IMSIU), Riyadh, Saudi Arabia & Computer Science Department, Faculty of Applied Sciences, Taiz University, Taiz, Yemen
Harish Kumar G R, College of Computer Science, King Khalid University, Abha, Kingdom of Saudi Arabia
Anuja Arora, Jaypee Institute of Information Technology, Noida, India
- 38 **African Buffalo Optimization for One Dimensional Bin Packing Problem**
Amira Gherboudj, MISC laboratory, Department of Computer Science and its Applications Abdelhamid Mehri University, Constantine, Algeria
- 53 **An Adaptive Intrusion Detection Scheme for Cloud Computing**
Nurudeen Mahmud Ibrahim, Universiti Teknologi Malaysia, Johor Bahru, Malaysia
Anazida Zainal, Universiti Teknologi Malaysia, Johor Bahru, Malaysia

COPYRIGHT

The *International Journal of Swarm Intelligence Research (IJSIR)* (ISSN 1947-9263; eISSN 1947-9271), Copyright © 2019 IGI Global. All rights, including translation into other languages reserved by the publisher. No part of this journal may be reproduced or used in any form or by any means without written permission from the publisher, except for noncommercial, educational use including classroom teaching purposes. Product or company names used in this journal are for identification purposes only. Inclusion of the names of the products or companies does not indicate a claim of ownership by IGI Global of the trademark or registered trademark. The views expressed in this journal are those of the authors but not necessarily of IGI Global.

The *International Journal of Swarm Intelligence Research* is indexed or listed in the following: ACM Digital Library; Bacon's Media Directory; Cabell's Directories; DBLP; Google Scholar; INSPEC; JournalTOCs; MediaFinder; SCOPUS; The Standard Periodical Directory; Ulrich's Periodicals Directory; Web of Science; Web of Science Emerging Sources Citation Index (ESCI)