

# Table of Contents

## International Journal of Distributed Systems and Technologies

Volume 11 • Issue 3 • July-September-2020 • ISSN: 1947-3532 • eISSN: 1947-3540

### Research Articles

- 1      **Using Wireless Multimedia Sensor Networks to Enhance Early Forest Fire Detection**  
Houache Noureddine, Oran 1 University, Algeria  
Kechar Bouabdellah, Oran 1 University, Algeria
- 22     **An Energy and Fault Aware Mechanism of Wireless Sensor Networks Using Multiple Mobile Agents**  
Rajendra Kumar Dwivedi, Madan Mohan Malaviya University of Technology, Gorakhpur, India  
Rakesh Kumar, Madan Mohan Malaviya University of Technology, Gorakhpur, India
- 42     **Models for Internal Clustering Validation Indexes Based on Hadoop-MapReduce**  
Soumeya Zerabi, Abdelhamid Mehri Constantine 2 University, Algeria  
Souham Meshoul, Princess Noura University, Saudi Arabia  
Samia Boucherkha, Abdelhamid Mehri Constantine 2 University, Algeria
- 68     **An Osmosis-Based Intelligent Agent Scheduling Framework for Cloud Bursting in a Hybrid Cloud**  
Preethi Sheba Hepsiba, CMR Institute of Technology, Bengaluru, India and Karunya Institute of Technology and Sciences, India  
Grace Mary Kanaga E., Karunya Institute of Technology and Sciences, India
- 89     **Improved Compact Routing Schemes for Random Interconnects**  
Chi-Hieu Nguyen, Hanoi University of Science and Technology, Vietnam  
Chung T. Kieu, Hanoi University of Science and Technology, Vietnam  
Khanh-Van Nguyen, Hanoi University of Science and Technology, Vietnam

### COPYRIGHT

The **International Journal of Distributed Systems and Technologies (IJ DST)** (ISSN 1947-3532; eISSN 1947-3540), Copyright © 2020 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 Distributed Systems and Technologies* is indexed or listed in the following: ACM Digital Library; Bacon's Media Directory; Cabell's Directories; Compendex (Elsevier Engineering Index); DBLP; Google Scholar; INSPEC; JournalTOCs; Library & Information Science Abstracts (LISA); Linguistics & Language Behavior Abstracts (LLBA); MediaFinder; SCOPUS; The Standard Periodical Directory; Ulrich's Periodicals Directory; Web of Science; Web of Science Emerging Sources Citation Index (ESCI)