

Table of Contents

Journal of Information Technology Research

Volume 14 • Issue 2 • April-June-2021 • ISSN: 1938-7857 • eISSN: 1938-7865

RESEARCH ARTICLES

- 1 **Gamification of University Subjects: A Case Study for Operations Management**
Miguel Ángel Montañés-Del Río, Universidad de Cádiz, Spain
Vanessa Rodríguez Cornejo, Universidad de Cádiz, Spain
Margarita Ruiz Rodríguez, Universidad de Cádiz, Spain
Jaime Sánchez Ortiz, Universidad de Cádiz, Spain

- 30 **Predicting the Efficiency and Success Rate of Programming Courses in MOOC Using Machine Learning Approach for Future Employment in the IT Industry**
Shivangi Gupta, Amity University, Noida, India
A. Sai Sabitha, Amity University, Noida, India
Sunil Kumar Chowdhary, Amity Univeristy, Noida, India

- 48 **Content-Based Medical Image Retrieval Using Delaunay Triangulation Segmentation Technique**
Sneha Kugunavar, Department of P. G. Studies and Research in Computer Science, Kuvempu University, India
Prabhakar C. J., Department of P. G. Studies and Research in Computer Science, Kuvempu University, India

- 67 **A Literature Review on MOOCs Integrated With Learning Analytics**
Zhonggen Yu, Beijing Language and Culture University, China

- 85 **Optimization of Favourable Test Path Sequences Using Bio-Inspired Natural River System Algorithm**
Nisha Rathee, Indira Gandhi Delhi Technical University for Women, India
Rajender Singh Chhillar, Maharshi Dayanand University, India

- 106 **Silhouette Pose Feature-Based Human Action Classification Using Capsule Network**
A. F. M. Saifuddin Saif, American International University, Bangladesh
Md. Akib Shahriar Khan, American International University, Bangladesh
Abir Mohammad Hadi, American International University, Bangladesh
Rahul Proshad Karmoker, American International University, Bangladesh
Joy Julian Gomes, American International University, Bangladesh

- 125 **Gesture Controlled Tactile Augmented Reality Interface for the Visually Impaired**
Siddharth Kalra, Amity University, Noida, India
Sarika Jain, Amity University, Noida, India
Amit Agarwal, University of Petroleum and Energy Studies, India

- 152 **Novel PSSM-Based Approaches for Gene Identification Using Support Vector Machine**
Heena Farooq Bhat, Department of Computer Science, University of Kashmir, India
M. Arif Wani, Department of Computer Science, University of Kashmir, India

- 174 **Enhanced Churn Prediction Using Stacked Heuristic Incorporated Ensemble Model**
Sivasankar Karuppaiah, National Institute of Technology, Tiruchirappalli, India
N. P. Gopalan, National Institute of Technology, Tiruchirappalli, India

- 187 **Improving Professional Skills of Music Teachers Through the Use of Distance Learning**
Svetlana V. Karkina, Kazan Federal University, Russia
Roza A. Valeeva, Kazan Federal University, Russia
Andreja Istenič Starčič, University of Primorska, Slovenia

Copyright

The **Journal of Information Technology Research (JITR)** (ISSN 1938-7857; eISSN 1938-7865), Copyright © 2021 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 *Journal of Information Technology Research* is indexed or listed in the following: ACM Digital Library; Bacon's Media Directory; Cabell's Directories; Compendex (Elsevier Engineering Index); CSA Illumina; DBLP; GetCited; Google Scholar; INSPEC; JournalTOCs; MediaFinder; The Index of Information Systems Journals; The Standard Periodical Directory; UGC-CARE List (India); Ulrich's Periodicals Directory; Web of Science; Web of Science Emerging Sources Citation Index (ESCI)