

# Table of Contents

## International Journal of Embedded and Real-Time Communication Systems

Volume 10 • Issue 2 • April-June-2019 • ISSN: 1947-3176 • eISSN: 1947-3184

*An official publication of the Information Resources Management Association*

### Research Articles

- 1 String-Based Feature Representation for Trajectory Clustering**  
B. A. Sabarish, Department of Computer Science and Engineering, Amrita School of Engineering, Coimbatore, Amrita Vishwa Vidyapeetham, India  
Karthi R., Department of Computer Science and Engineering, Amrita School of Engineering, Coimbatore, Amrita Vishwa Vidyapeetham, India  
Gireesh Kumar T, TIFAC CORE in Cyber Security, Amrita School of Engineering, Coimbatore, Amrita Vishwa Vidyapeetham, India
- 19 CompactRIO Based Real Time Implementation of AES Algorithm for Embedded Applications**  
El Adib Samir, Remote Sensing & Geographic Information System Unit (RS&GIS), University of Abdelmalek Essaadi, National School for Applied Sciences of Tetuan, Tetuan, Morocco  
Raissouni Naoufal, Remote Sensing & Geographic Information System Unit (RS&GIS), University of Abdelmalek Essaadi, National School for Applied Sciences of Tetuan, Tetuan, Morocco.
- 37 Semi-Explicit Composition Methods in Memcapacitor Circuit Simulation**  
Denis N. Butusov, Saint-Petersburg Electrotechnical University “LETI”, Saint Petersburg, Russia  
Valerii Y. Ostrovskii, Saint-Petersburg Electrotechnical University “LETI”, Saint Petersburg, Russia  
Artur I. Karimov, Saint-Petersburg Electrotechnical University “LETI”, Saint Petersburg, Russia  
Valery S. Andreev, Saint-Petersburg Electrotechnical University “LETI”, Saint Petersburg, Russia
- 53 A Training Method of Convolution Neural Network for Illumination Robust Pedestrian Detection**  
Junmo Jeong, Dept. of electronics Engineering, Seokyeong University, Seoul, Korea
- 66 Implementation and Comparative Analysis of k-means and Fuzzy c-means Clustering Algorithms for Tasks Allocation in Distributed Real Time System**  
Harendra Kumar, Gurukula Kangri Vishwavidyalaya, Haridwar, India  
Isha Tyagi, Gurukula Kangri Vishwavidyalaya, Haridwar, India
- 87 Design of an Intelligent Data Cache with Replacement Policy**  
B. Shameedha Begum, National Institute of Technology Tiruchirappalli, Tiruchirappalli, India  
N. Ramasubramanian, National Institute of Technology Tiruchirappalli, Tiruchirappalli, India
- 108 Center of Pressure Measurement to Evaluate Fall Risk in the Elderly**  
Chong Min Hong, Ewha Womans University, Seoul, Korea
- 117 Ambient Intelligence At-Home Laboratory for Human Everyday Life**  
Alexander Yu Meigal, Petrozavodsk State University, Petrozavodsk, Russia  
Dmitry G. Korzun, Petrozavodsk State University, Petrozavodsk, Russia  
Liudmila I. Gerasimova-Meigal, Petrozavodsk State University, Petrozavodsk, Russia  
Alexander V. Borodin, Petrozavodsk State University, Petrozavodsk, Russia  
Yulia V. Zavyalova, Petrozavodsk State University, Petrozavodsk, Russia

### COPYRIGHT

The *International Journal of Embedded and Real-Time Communication Systems (IJERTCS)* (ISSN 1947-3176; eISSN 1947-3184), 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 Embedded and Real-Time Communication Systems* is indexed or listed in the following: ACM Digital Library; Bacon's Media Directory; Cabell's Directories; DBLP; Google Scholar; INSPEC; JournalTOCs; Library & Information Science Abstracts (LISA); MediaFinder; SCOPUS; The Standard Periodical Directory; Ulrich's Periodicals Directory