



# Journal of Intelligent Learning Systems and Applications





# **Journal Editorial Board**

ISSN Print: 2150-8402 ISSN Online: 2150-8410

http://www.scirp.org/journal/jilsa

### **Editors-in-Chief**

Dr. Steve S. H. Ling
University of Technology Sydney, Australia
Prof. Xin Xu
National University of Defense Technology, China

## **Editorial Advisory Board**

Prof. Haibo He University of Rhode Island, USA

Prof. Rob Law Hong Kong Polytechnic University, China

Prof. Mengchi LiuCarleton University, CanadaProf. Yi PanGeorgia State University, USA

# **Editorial Board (According to Alphabet)**

Prof. Tao Ban National Institute of Information and Communications Technology, Japan

Dr. Vitoantonio BevilacquaPolytechnic of Bari, ItalyDr. Kit Yan ChanCurtin University, Australia

**Dr. Peng Chen** Chinese Academy of Sciences, China

Prof. Hengda Cheng Utah State University, USA

**Dr. Ying Guo** Commonwealth Scientific and Industrial Research Organization, Australia

Prof. Kao-Shing HwangNational Sun Yat-sen University, Chinese TaipeiDr. Frank JiangUniversity of New South Wales, AustraliaDr. Michail G. LagoudakisTechnical University of Crete, Greece

Dr. Hak-Keung LamKing's College London, UKProf. Shutao LiHunan University, ChinaProf. Yiguang LiuSichuan University, China

**Prof. Kin Huat Low** Nanyang Technological University, Singapore

Dr. Vincenzo PacelliUniversity of Foggia, ItalyProf. George PanayiotakisUniversity of Patras, Greece

Dr. Phyo Phyo SanNanyang Technological University, SingaporeProf. Steven Weidong SuUniversity of Technology Sydney, Australia

Prof. Theodore B. TrafalisThe University of Oklahoma, USAProf. Evangelos TriantaphyllouLouisiana State University, USADr. Jue WangChinese Academy of Sciences, China

Prof. Xuesong Wang China University of Mining and Technology, China

Prof. Simon X. YangUniversity of Guelph, CanadaProf. Shi YingWuhan University, ChinaDr. Yudong ZhangColumbia University, USA

Prof. Wei ZhongUniversity of South Carolina Upstate, USAProf. Dingxuan ZhouCity University of Hong Kong, China

Prof. Antanas Zilinskas Institute of Mathematics and Informatics, Lithuania



# **Table of Contents**

Volume 7	Number 1	February 2015
A Novel Fuzzy	Membership Partitioning for Improved Vo	ting in Fault Tolerant System
A. Pathak, T. A	Agarwal, A. Mohan	1
Experimental [	Design and Its Posterior Efficiency for the C	Calibration of Wearable Sensors
L. Ye, S. W. Sı	J	11
Applying DNA	Computation to Error Detection Problem i	n Rule-Based Systems
B. Madahian,	A. Salighehdar, R. Amini	21

## Journal of Intelligent Learning Systems and Applications (JILSA)

#### **Journal Information**

#### **SUBSCRIPTIONS**

The *Journal of Intelligent Learning Systems and Applications* (Online at Scientific Research Publishing, <a href="www.SciRP.org">www.SciRP.org</a>) is published quarterly by Scientific Research Publishing, Inc., USA.

#### **Subscription rates:**

Print: \$89 per copy.

To subscribe, please contact Journals Subscriptions Department, E-mail: <a href="mailto:sub@scirp.org">sub@scirp.org</a>

#### **SERVICES**

#### Advertisements

Advertisement Sales Department, E-mail: service@scirp.org

#### Reprints (minimum quantity 100 copies)

Reprints Co-ordinator, Scientific Research Publishing, Inc., USA.

E-mail: sub@scirp.org

#### **COPYRIGHT**

#### COPYRIGHT AND REUSE RIGHTS FOR THE FRONT MATTER OF THE JOURNAL:

Copyright © 2015 by Scientific Research Publishing Inc.

This work is licensed under the Creative Commons Attribution International License (CC BY). http://creativecommons.org/licenses/by/4.0/

#### COPYRIGHT FOR INDIVIDUAL PAPERS OF THE JOURNAL:

Copyright © 2015 by author(s) and Scientific Research Publishing Inc.

#### REUSE RIGHTS FOR INDIVIDUAL PAPERS:

Note: At SCIRP authors can choose between CC BY and CC BY-NC. Please consult each paper for its reuse rights.

#### DISCLAIMER OF LIABILITY

Statements and opinions expressed in the articles and communications are those of the individual contributors and not the statements and opinion of Scientific Research Publishing, Inc. We assume no responsibility or liability for any damage or injury to persons or property arising out of the use of any materials, instructions, methods or ideas contained herein. We expressly disclaim any implied warranties of merchantability or fitness for a particular purpose. If expert assistance is required, the services of a competent professional person should be sought.

#### PRODUCTION INFORMATION

For manuscripts that have been accepted for publication, please contact:

E-mail: jilsa@scirp.org

#### What is SCIRP?

Scientific Research Publishing (SCIRP) is one of the largest Open Access journal publishers. It is currently publishing more than 200 open access, online, peer-reviewed journals covering a wide range of academic disciplines. SCIRP serves the worldwide academic communities and contributes to the progress and application of science with its publication.

# What is Open Access?

All original research papers published by SCIRP are made freely and permanently accessible online immediately upon publication. To be able to provide open access journals, SCIRP defrays operation costs from authors and subscription charges only for its printed version. Open access publishing allows an immediate, worldwide, barrier-free, open access to the full text of research papers, which is in the best interests of the scientific community.

- · High visibility for maximum global exposure with open access publishing model
- Rigorous peer review of research papers
- Prompt faster publication with less cost
- Guaranteed targeted, multidisciplinary audience





Website: http://www.scirp.org Subscription: sub@scirp.org Advertisement: service@scirp.org