## International Journal of Systems Biology and Biomedical Technologies

January-March 2015, Vol. 3, No. 1

## **Table of Contents**

## RESEARCH ARTICLES

1 Evolutionary Search for Cellular Automata with Self-Organizing Properties toward Controlling Decentralized Pervasive Systems and Its Applications

Yusuke Iwase, Internet Initiative Japan Inc. (IIJ), Tokyo, Japan Reiji Suzuki, Nagoya University, Nagoya, Japan Takaya Arita, Nagoya University, Nagoya, Japan

20 Biomedical Instrumentation: Diagnosis and Therapy

John G. Webster, Department of Biomedical Engineering, University of Wisconsin, Madison, WI, USA

39 Biologically Inspired Components in Embedded Vision Systems

Li-Minn Ang, School of Computing and Mathematics, Charles Sturt University, Perth, Australia Kah Phooi Seng, School of Computing and Mathematics, Charles Sturt University, Perth, Australia Christopher Wing Hong Ngau, Intel, Pulau Pinang, Malaysia

73 Polarization-based Robot Orientation and Navigation: Progress and Insights

Abd El Rahman Shabayek, Computer Science Department, Suez Canal University, Ismailia, Egypt Olivier Morel, University of Burgundy, Dijon, France David Fofi, University of Burgundy, Dijon, France

## Copyright

The International Journal of Systems Biology and Biomedical Technologies (IJSBBT) (ISSN 2160-9586; eISSN 2160-9594), Copyright © 2015 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 Systems Biology and Biomedical Technologies is indexed or listed in the following: ACM Digital Library; Bacon's Media Directory; Cabell's Directories; Google Scholar; INSPEC; JournalTOCs; MediaFinder; ProQuest Advanced Technologies & Aerospace Journals; ProQuest Biological Science Journals; ProQuest Computer Science Journals; ProQuest Engineering Journals; ProQuest Illustrata: Natural Science; ProQuest Illustrata: Technology; ProQuest Natural Sciences Journals; ProQuest SciTech Journals; ProQuest Technology Journals; The Standard Periodical Directory; Ulrich's Periodicals Directory