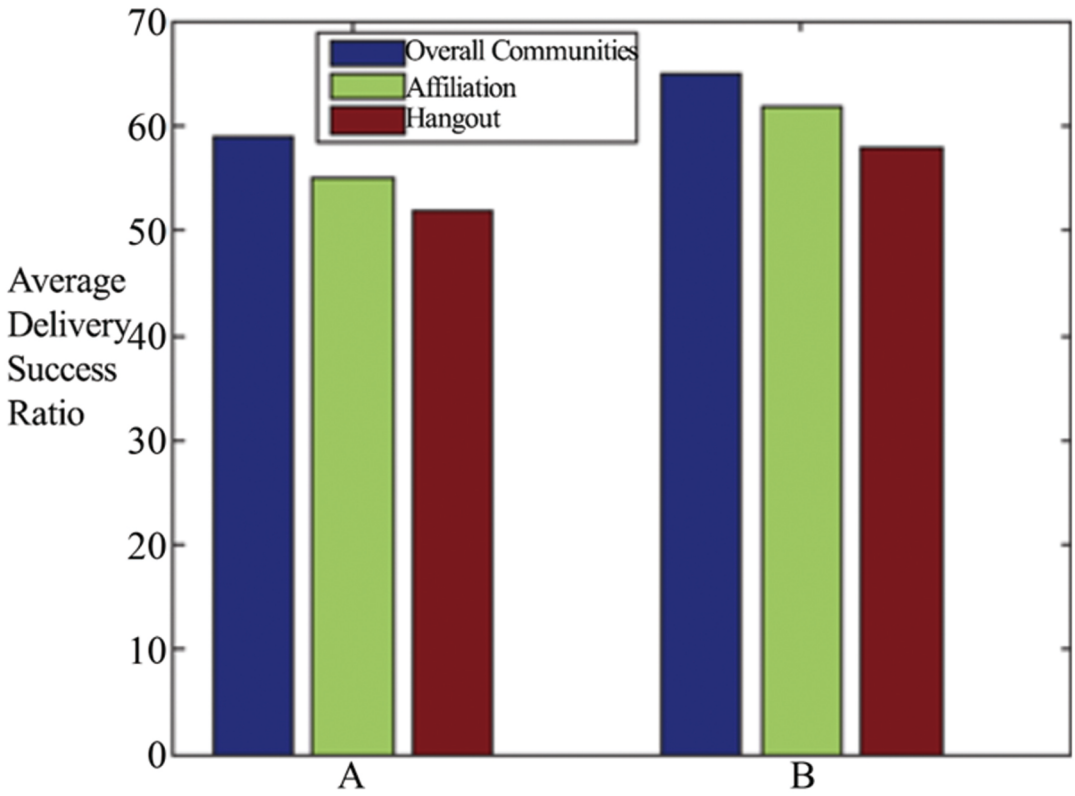
ISSN: 1945-3116 Vol. 7, No. 2, February 2014

Scientific Research

Journal of Software Engineering and Applications



ISSN: 1945-3116

www.scirp.org/journal/jsea

Journal Editorial Board

ISSN 1945-3116 (print) ISSN 1945-3124 (online)
http://www.scirp.org/journal/jsea

Editor-in-Chief

Prof. Yashwant K. Malaiya Colorado State University, USA

Editorial Board

Dr. Nicoletta Adamo-Villani Purdue University, USA
Prof. Kuang-Hua Chang The University of Oklahoma, USA
Dr. Calvin Yu-Chian Chen China Medical University, China
Dr. Kim-Kwang Raymond Choo University of South Australia, Australia
Prof. Steven A. Demurjian The University of Connecticut, USA
Dr. Phan H. Giang George Mason University, USA
Dr. Zonghua Gu Zhejiang University, China
Dr. Nabil Hameurlain University of Pau, France
Dr. Wolfgang Herzner Austrian Institute of Technology, Austria
Dr. Jacky Wai Keung City University of Hong Kong, China
Dr. Mitsuhiro Kimura Hosei University, Japan
Prof. Chang-Hwan Lee Dongguk University, South Korea
Prof. Anthony F. Norcio University of Maryland, USA
Prof. Janche Sang Cleveland State University, USA
Prof. Midthe V. Srinath Mahendra Engineering College, India
Dr. Eliot Winer The Iowa State University, USA
Prof. Xin Yuan Florida State University, USA

Journal of Software Engineering and Applications, 2014, 7, 69-134
Published Online February 2014 in SciRes (http://www.scirp.org/journal/jsea/)

TABLE OF CONTENTS

Volume 7 Number 2 February 2014

Improves Treatment Programs of Lung Cancer Using Data Mining Techniques
Z. S. Zubi, R. A. Saad.....69
On Exploiting Temporal, Social, and Geographical Relationships for Data Forwarding in Delay Tolerant Networks
Z. J. Li, M. Li, L. X. Gao.....78
Enhancing Software Process Management through Control Charts
V. Vashisht.....87
Obsidian: Pattern-Based Unit Test Implementations
J. Bowring, H. Hegler.....94
Software Composition Using Behavioral Models of Design Patterns
S. Hasso, C. R. Carlson.....104
Image Processing Tool Promoting Decision-Making in Liver Surgery of Patients with Chronic Kidney Disease
K. Bliznakova, N. Kolev, Z. Bliznakov, I. Buliev, A. Tonev, E. Encheva, K. Ivanov.....118
User Interface for People with Autism Spectrum Disorders
N. Pavlov.....128

The figure on the front cover is from the article published in Journal of Software Engineering and Applications, 2014, Vol. 7, No. 2, pp. 78-86 by Zhijie Li, Ming Li and Longxiang Gao.

Journal of Software Engineering and Applications (JSEA)

Journal Information

SUBSCRIPTIONS

The *Journal of Software Engineering and Applications* (Online at Scientific Research Publishing, www.SciRP.org) is published monthly by Scientific Research Publishing, Inc., USA.

Subscription rates:

Print: $89 per issue.
To subscribe, please contact Journals Subscriptions Department, E-mail: sub@scirp.org

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 © 2014 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 © 2014 by author(s) and Scientific Research Publishing Inc.

REUSE RIGHTS FOR INDIVIDUAL PAPERS:

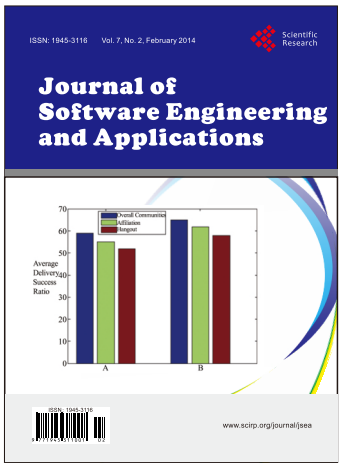
Note: At SCIRP authors can choose between CC BY and CC BY-NC. Please consult each paper for its reuse rights.

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: jsea@scirp.org



Call for Papers

Journal of Software Engineering and Applications (JSEA)

ISSN 1945-3116 (print) ISSN 1945-3124 (online)

www.scirp.org/journal/jsea

JSEA publishes four categories of original technical articles: papers, communications, reviews, and discussions. Papers are well-documented final reports of research projects. Communications are shorter and contain noteworthy items of technical interest or ideas required rapid publication. Reviews are synoptic papers on a subject of general interest, with ample literature references, and written for readers with widely varying background. Discussions on published reports, with author rebuttals, form the fourth category of JSEA publications.

Subject Coverage

All manuscripts must be prepared in English, and are subject to a rigorous and fair peer-review process. Accepted papers will immediately appear online followed by printed hard copy. The journal publishes original papers including but not limited to the following fields:

Automated Software Design and Synthesis
Automated Software Specification
Component-Based Software Engineering
Computer-Supported Cooperative Work
Formal Methods
Knowledge Acquisition
Object-Oriented Technology
Patterns and Frameworks
Process and Workflow Management
Program Understanding Issues
Programming Languages and Software Engineering
Reflection and Metadata Approaches
Reliability and Fault Tolerance
Requirements Engineering
Reverse Engineering
Software Architecture
Software Design Methods
Software Domain Modeling and Meta-Modeling
Software Engineering Decision Support
Software Engineering Education
Software Maintenance and Evolution
Software Process Modeling
Software Quality
Software Reuse
Software Testing
Tutoring, Help, Documentation Systems

We are also interested in short papers (letters) that clearly address a specific problem, and short survey or position papers that sketch the results or problems on a specific topic. Authors of selected short papers would be invited to write a regular paper on the same topic for future issues of the JSEA.

Notes for Prospective Authors

Submitted papers should not have been previously published nor be currently under consideration for publication elsewhere. All papers are refereed through a peer review process. For more details about the submissions, please access the website.

Website and E-mail

http://www.scirp.org/journal/jsea E-mail: jsea@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, by delivering superior scientific publications and scientific information solution provider that enable advancement in scientific research.

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, world-wide, 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

Scientific Research

Website: http://www.scirp.org

Subscription: sub@scirp.org

Advertisement: service@scirp.org