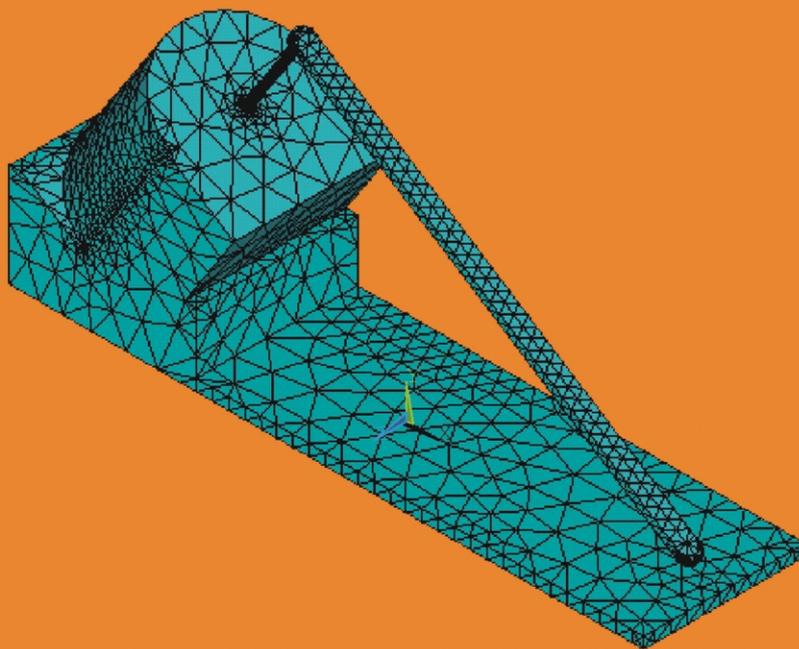


ISSN: 1945-3116 Vol. 3, No. 12, December 2010



Scientific
Research

Journal of Software Engineering and Applications



ISSN: 1945-3116



www.scirp.org/journal/jsea

Journal Editorial Board

<http://www.scirp.org/journal/jsea>

Editor-in-Chief

Prof. Jan Jürjens Technical University Dortmund, Germany

Executive Editor in Chief

Prof. Yanxiang He Wuhan University, China

Editorial Advisory Board

Prof. Hengda Cheng Utah State University, USA

Dr. Mengchi Liu Carleton University, Canada

Prof. Yi Pan Georgia State University, USA

Editorial Board (According to Alphabet)

Prof. Stéphane Bordas Cardiff University, UK

Prof. Jiannong Cao Hong Kong Polytechnic University, China

Prof. Guoliang Chen University of Science and Technology of China, China

Dr. Kim-Kwang Raymond Choo Australian Institute of Criminology, Australia

Dr. Zonghua Gu Zhejiang University, China

Dr. Nabil Hameurlain University of Pau, France

Prof. Keqing He Wuhan University, China

Dr. Wolfgang Herzner Austrian Institute of Technology, Austria

Dr. Vassilios (Bill) Karakostas City University, UK

Prof. Chang-Hwan Lee Dongguk University, Korea (South)

Dr. Weiping Li Peking University, China

Prof. Kasi Periyasamy University of Wisconsin-La Crosse, USA

Prof. Miodrag Potkonjak University of California, USA

Dr. Ruben Prieto-Diaz James Madison University, Spain

Prof. Juergen Rilling Concordia University, Canada

Prof. Michael Ryan Dublin City University, Ireland

Dr. Midthe V. Srinath Chinese Academy of Sciences, China

Dr. Ladan Tahvildari University of Waterloo, USA

Prof. Jian Wang University of Wisconsin-La Crosse, USA

Prof. Shi Ying Wuhan University, China

Prof. Xin Yuan Florida State University, USA

Dr. Mao Zheng Anna University, India

Editorial Assistant

Tian Huang Scientific Research Publishing, USA

TABLE OF CONTENTS

Volume 3 Number 12

December 2010

Context-Based Recommendation Approach for Measurement and Evaluation Projects	
H. Molina, L. Olsina, G. Rossi.....	1089
Selection of Suitable Features for Modeling the Durations of Syllables	
K. S. Rao, S. G. Koolagudi.....	1107
A New Formalism for Modeling a Multi Agent Systems: Agent Petri Nets	
B. Marzougui, K. Hassine, K. Barkaoui.....	1118
Weighted Multi-Skill Resources Project Scheduling	
F. S. Al-Anzi, K. Al-Zamel, A. Allahverdi.....	1125
Empirical Research on Critical Success Factors of Agile Software Process Improvement	
J. P. Wan, R. T Wang.....	1131
An Efficient PRBG Based on Chaotic Map and Engel Continued Fractions	
A. Masmoudi, W. Puech, M. S. Bouhlef.....	1141
Parametric Tolerance Analysis of Mechanical Assembly Using FEA and Cost Competent Tolerance Synthesis Using Neural Network	
G. Jayaprakash, K. Sivakumar, M. Thilak.....	1148
Representations in Genetic Algorithm for the Job Shop Scheduling Problem: A Computational Study	
T. F. Abdelmaguid.....	1155
An Automatic Recognizer for Iraqi License Plates Using ELMAN Neural Network	
A. Mohsin, A. H. Hassin, I. Q. A. Jaleel.....	1163
Research on Wireless Sensor Networks Topology Models	
Z. Q. Zhang, H. Zhao, J. Zhu, D. Z. Li.....	1167

The figure on the front cover is from the article published in the Journal of Software Engineering and Applications, 2010, Vol. 3, No. 12, pp. 1148-1154 by Govindarajalu Jayaprakash, Karuppan Sivakumar and Manoharan Thilak.

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: \$50 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©2010 Scientific Research Publishing, Inc.

All Rights Reserved. No part of this publication may be reproduced, stored in a retrieval system, or transmitted, in any form or by any means, electronic, mechanical, photocopying, recording, scanning or otherwise, except as described below, without the permission in writing of the Publisher.

Copying of articles is not permitted except for personal and internal use, to the extent permitted by national copyright law, or under the terms of a license issued by the national Reproduction Rights Organization.

Requests for permission for other kinds of copying, such as copying for general distribution, for advertising or promotional purposes, for creating new collective works or for resale, and other enquiries should be addressed to the Publisher.

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



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.

Editor-in-Chief

Prof. Jan Jürjens, Technical University Dortmund, Germany

Subject Coverage

- Applications and Case Studies
- Artificial Intelligence Approaches to Software Engineering
- Automated Software Design and Synthesis
- Automated Software Specification
- Component-Based Software Engineering
- Computer-Supported Cooperative Work
- Software Design Methods
- Human-Computer Interaction
- Internet and Information Systems Development
- Knowledge Acquisition
- Multimedia and Hypermedia in Software Engineering
- Object-Oriented Technology
- Patterns and Frameworks
- Process and Workflow Management
- Programming Languages and Software Engineering
- Program Understanding Issues
- Reflection and Metadata Approaches
- Reliability and Fault Tolerance
- Requirements Engineering
- Reverse Engineering
- Security and Privacy
- Software Architecture
- Software Domain Modeling and Meta-Modeling
- Software Engineering Decision Support
- Software Maintenance and Evolution
- Software Process Modeling
- Software Reuse
- Software Testing
- System Applications and Experience
- Tutoring, Help and Documentation Systems

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

Website: <http://www.scirp.org/journal/jsea>

E-Mail: jsea@scirp.org