PROCEEDINGS

The 8th International Conference on Advanced Software Engineering and Its Applications

— ASEA 2015 —

25–28 November 2015 Jeju Island, South Korea

This work was supported by the Korean Federation of Science and Technology Societies Grant funded by the Korean Government

Edited by Haeng-kon Kim, Tai-hoon Kim, and Akingbehin Kiumi





















All rights reserved.

Copyright and Reprint Permissions: Abstracting is permitted with credit to the source. Libraries may photocopy beyond the limits of US copyright law, for private use of patrons, those articles in this volume that carry a code at the bottom of the first page, provided that the per-copy fee indicated in the code is paid through the Copyright Clearance Center, 222 Rosewood Drive, Danvers, MA 01923.

Other copying, reprint, or republication requests should be addressed to: IEEE Copyrights Manager, IEEE Service Center, 445 Hoes Lane, P.O. Box 133, Piscataway, NJ 08855-1331.

The papers in this book comprise the proceedings of the meeting mentioned on the cover and title page. They reflect the authors' opinions and, in the interests of timely dissemination, are published as presented and without change. Their inclusion in this publication does not necessarily constitute endorsement by the editors, the IEEE Computer Society, or the Institute of Electrical and Electronics Engineers, Inc.

IEEE Computer Society Order Number: P5728 BMS Part Number: CFP1521F-CDR ISBN: 978-1-4673-9837-4

Additional copies may be ordered from:

IEEE Computer Society
Customer Service Center
10662 Los Vaqueros Circle
P.O. Box 3014
Los Alamitos, CA 90720-1314
Tel: + 1 800 272 6657
Fax: + 1 714 821 4641
http://computer.org/cspress
csbooks@computer.org

IEEE Service Center
445 Hoes Lane
P.O. Box 1331
Piscataway, NJ 08855-1331
Tel: +1 732 981 0060
Fax: +1 732 981 9667
http://shop.ieee.org/store/
customer-service@ieee.org

IEEE Computer Society
Asia/Pacific Office
Watanabe Bldg., 1-4-2
Minami-Aoyama
Minato-ku, Tokyo 107-0062
JAPAN
Tel: +81 3 3408 3118
Fax: +81 3 3408 3553
tokyo.ofc@computer.org

Individual paper REPRINTS may be ordered at: <reprints@computer.org>

Editorial production by Randall Bilof Cover art production by Mark J. Bartosik



IEEE Computer Society
Conference Publishing Services (CPS)
http://www.computer.org/cps

2015 8th International Conference on Advanced Software Engineering & Its Applications

ASEA 2015

Table of Contents

Foreword Preface Conference Organization	vii		
		Technical Papers	
Usability Evaluation Methods for Software Development: A Systematic Mapping Review	1		
Freddy Paz and José Antonio Pow-Sang			
Appraisal for Lokpal Body Using Fuzzy Multicriteria Approach Praveen Ranjan Srivastava	5		
High Privacy for Data Disclosures Using Tree-EMD Debnath Bhattacharyya and Tai-Hoon Kim	13		
A Study on the Modified Estimation Algorithm for Searching Target Position	18		
A Study on Optimum Weight Value and Cost MUSIC Algorithm of Array Steering Vector	2		
Kwan Hyeong Lee			
Semantic Data Process Method Based on RDF for Context Information	25		
Impact of Version History Metrics on Maintainability	30		
Consideration of Similarity Factors in Integration of FP and SLOC for Software Project Estimation	36		
Brajesh Kumar Singh, Akash Punhani, Shailesh Tiwari, and A. K. Misra			

(MongoDB) for Big Data Applications	41
Satyadhyan Chickerur, Anoop Goudar, and Ankita Kinnerkar	
A Hybrid Harmony Search Algorithm for the Job Shop Scheduling Problems	48
Characterization of Information Systems with Fuzzy and Intuitionistic Fuzzy Decision Attributes	53
B. Krishnaveni, V. Syamala, D. Latha, and G. Ganesan	
Combining Formal and Informal Decision Making Approaches to the Design of a Personalised GIS	59
Katerina Kabassi and Georgios P. Heliades	
Enable Concurrent Byzantine Fault Tolerance Computing with Software Transactional Memory	67
Wenbing Zhao, Honglei Zhang, Xiong Luo, and Yueqin Zhu	
A Hypermedia-Driven Approach for Adapting Processes via Adaptation	
Processes Roy Oberhauser	73
Author Index	81