

Proceedings of Korea–Japan Joint Workshop on ICT

Kwanwoo Lee

Tsuneo Nakanishi (Eds.)



POSCO International Center, POSTECH, Pohang, Korea,
20–22 September 2012
<http://www.f.ait.kyushu-u.ac.jp/kjjwonict/>

Proceedings of Korea–Japan Joint Workshop on ICT

POSCO International Center, POSTECH, Pohang, Korea,

20–22 September 2012

<http://www.f.ait.kyushu-u.ac.jp/kjjwonict/>

Kwanwoo Lee

Tsuneo Nakanishi

(Eds.)

Copyright © 2012 by Information Processing Society of Japan & Korea Institute of Information Scientists and Engineers.

All rights reserved. No part of the material protected by this copyright may be reproduced or utilized in any form without permission from the copyright owner.

Proceedings of Korea–Japan Joint Workshop on ICT

Published 2012 by
Information Processing Society of
Japan & Korean Institute of Information
Scientists and Engineers

ISBN 978-89-960761-5-5

비매품



Table of Contents

Preface	v
Organization	vi
 Technical Session 1	
Case Study: Verification of ECML Model Using SpaceEx.	1
Jaeyeon Jo, Junbeom Yoo, Hae Young Lee, and Won-Tae Kim	
Mitigating the State Explosion Problem of Multi-Robot Controller by Decentralized Model	5
Sunghae Kim and Gihwon Kwon	
A Software Hazard Analysis Technique based on STPA	9
Sun Hwi Lee, Sanghyun Yoon, and Junbeom Yoo	
Comparison of Field Mapping Approaches to Message Translation for Data Communication Protocols	13
Jingyu Kim and Sungwon Kang	
 Technical Session 2	
A 3D Graphical User Interface Operable by Force Feedback Device ...	17
Yusuke Ouchi, Hiroaki Nishino, Tsuneo Kagawa and Kouichi Utsumiya	
A Design of Concept-Based Augmented Reality Environment	21
Tsuneo Kagawa, Yasuhiko Sumie, Masatoshi Nishimura and Hiroaki Nishino	
Study on Photo Recommendation Scheme in Collaborative Video Authoring	25
Fathoni Arief Musyaffa, Changhyeon Lee and Yong-Moo Kwon	
 Technical Session 3	
VULCAN: A Workbench for Feature-Oriented Product Line Software Development	29
Hyesun Lee, Jin-Seok Yang and Kyo Chul Kang	
Extractive Approach for Transit of Legacy Products to Software Product Line with Organization, Process and Technical Factors	33
Seonghye Yoon, Soojin Park and Sooyong Park	
An Integer Programming Based Decision Making Framework for Application Engineering in Software Product Line Development	37
Mohammad Fajar, Tsuneo Nakanishi, Kenji Hisazumi and Akira Fukuda	
 Technical Session 4	
Cloud Service Quality Stimulation Using Meta-Analysis	41
Duksan Ryu, Dajung Kim, Okjoo Choi and Jongmoon Baik	
Dependency Management System with Hadoop Streaming for Data- analytic Projects	45

Lin Li and Sozo Inoue,	
Performance Monitoring of Clouds for Network Centric Applications ...	49
Youngmin Kim, Heeju Joo, Jaechul Um, Honguk Woo, Eunho Heo and Chan-Gun Lee	

Technical Session 5

Archpoint: Architectural Points for Bidirectional Traceability between Design and Code	53
Naoyasu Ubayashi and Yasutaka Kamei	
A Model Driven Approach for the Interoperability of Web Applications ...	57
Mardiana and Keijiro Araki	
Internationalization of Domain Dictionary Management Tool	61
Shinta Inoue, Yoichi Omori and Keijiro Araki	

Keynote Speech

Engineering Service-Based Dynamic Software Product Lines	65
Prof. Jaejoon Lee	
Computing Department, Lancaster University, UK	

Preface

Kyushu Chapter, Information Processing Society of Japan (IPSJ) and Software Engineering Society, Korean Institute of Information Scientists and Engineers (SES/KIISE) held this workshop to provide an opportunity for researchers and engineers from Japan and Korea to exchange novel ideas and practical experiences in ICT. The workshop especially welcomes paper submissions from graduate students and younger engineers of the both countries to encourage them being professionals who can work globally.

Hosting Organizations

- Kyushu Chapter, Information Processing Society of Japan (IPSJ)
- Software Engineering Society, Korean Institute of Information Scientists and Engineers

(SES/KIISE)

Supporting Organization

- Software Engineers Association (SEA), Japan
- CosDEC, Software Engineering Center, National IT Industry Promotion Agency, Korea

Organization Committee

Chairs:

Keijiro Araki (Kyushu Univ.)
Kyo-chul Kang (POSTECH)

Steering Committees:

Kwanwoo Lee (Hangsun Univ.)
Tsuneo Nakanishi (Kyushu Univ.)

Publication Chair:

Hiroaki Nishino (Oita Univ.)

Program Committees:

Jongmoon Baik (KAIST)
Sungdeok Cha (Korea Univ.)
Hyuksoo Han (Sangmyung Univ.)
Kenji Hisazumi (Kyushu Univ.)
Hoh Peter In (Korea Univ.)
Sozo Inoue (Kyushu Institute of Technology)
Yasutaka Kamei (Kyushu Univ.)
Sungwon Kang (KAIST)
Tetsuro Katayama (Miyazaki Univ.)
Hyungshin Kim (Chungnam Univ.)
Teruaki Kitasuka (Kumamoto Univ.)
In-Young Ko (KAIST)
Shigeru Kusakabe (Kyushu Univ.)
Gihwon Kwon (Kyonggi Univ.)
ByungJung Lee (Univ. of Seoul)
Chan-gun Lee (Chung-Ang Univ.)
Yoichi Omori (Kyushu Univ.)
Sooyong Park (Sogang Univ.)
Naoyasu Ubayashi (Kyushu Univ.)
Masanobu Umeda (Kyushu Institute of Technology)
Junbeom Yoo (Konkuk Univ.)