

## Table of Contents

A Review on Variability Mechanisms for Product Lines .....	1
<i>Jihyun Lee, Sunmyung Hwang</i>	
Buffer-based Congestion Detection and Control in Wireless Multi-Channel Sensor Networks .....	5
<i>Siyong Park, Sunmyung Hwang</i>	
CDSS Service Integration Reference Model .....	9
<i>Jeong Ah Kim, Insook Cho, NamSun Kim</i>	
Configuration Management Process on Cloud Service for small R&D Organization .....	13
<i>Jeong Soo Park, SunTae Kim, Jeong Ah Kim</i>	
Tactic Based Approach to Building Domain Architecture .....	16
<i>Sung Nam Lee, Keokyoon Ko, Suntae Kim, Sooyoung Park</i>	
e-InsuBanking Software Product Line .....	20
<i>Jeong Ah Kim, JinSoo Park</i>	
MDT: Tool Support for Measuring Logical Coupling.....	24
<i>Suntae Kim, Bingu Shim</i>	
An Approach for Resource Version Control for Evolutionary Software Product Line.....	28
<i>Deokyoon Ko, Suntae Kim, Sooyoung Park</i>	
State of Art of Process Management Techniques for Defining and Measuring ..	33
<i>Jeong Ah Kim</i>	
Optimal Aggregator Node Selection in Wireless Sensor Networks .....	37
<i>Aziz Nasridinov, Young-Ho Park</i>	
Securing Wireless Sensor Networks Existing Solutions and Their Limitations...	40
<i>Aziz Nasridinov, Young-Ho Park</i>	

A Research on Methods of Top-k Query Processing in Wireless Sensor Networks.....	43
<i>Sun-Young Ihm, Young-Ho Park</i>	
An Efficient Data Aggregation Approach for Underwater Wireless Sensor Networks.....	46
<i>Khoa Thi-Minh Tran, Seung-Hyun Oh, Jeong-Yong Byun</i>	
Kinect Sensor based PC Control Interface for Handicapped Users.....	49
<i>Lee Sang Hyuk, Oh Seung Hyun</i>	
AUV-RM: Underwater Sensor Network Scheme for AUV Based River Monitoring.....	53
<i>Stanislav Tyan, Seung-Hyun Oh</i>	
Improvement of the Real Time Broadcasting System with Various Features.....	56
<i>Jaegel Yim</i>	
A Noise Reduction Method Incorporating Consonant and Vowel Characteristics for Dysarthric Speech Recognition.....	60
<i>Woo Kyeong Seong, Ji Hun Park, Hong Kook Kim</i>	
Auto Location and Security Alert System for Container Transportation.....	64
<i>Ronesh Sharma, Min-A Jung, Seong Ro Lee</i>	
Time Synchronization in Wireless Sensor Networks: Estimating Packet Delay..	68
<i>Shiu Kumar, Yeonwoo Lee, Seong Ro Lee</i>	
Dysarthric Speech Recognition Based on Error-Correction in a Weighted Finite State Transducer Framework.....	72
<i>Woo Kyeong Seong, Ji Hun Park, Hong Kook Kim</i>	
Weighted Averaging Method for Inner-Ship Fault Detection Using Wireless Sensor Network.....	75
<i>Jin Gwan Park, Min-A Jung, Seong Ro Lee</i>	
Application of Multiple Antenna Technique for WiMAX Based Maritime Network Applications.....	79
<i>Tushar Keshav, Yeonwoo Lee, Seong Ro Lee, Myeong Soo Choi</i>	
Smart Home-Control and Monitoring System Using Smart Phone.....	83
<i>Rajeev Piyare, Seong Ro Lee</i>	

FPGA Board Implementation of an Color Tracking Mobile Robot System.....	87
<i>Bold Sanjaa, Seong Ro Lee</i>	
Effects of Time-Scale Modification on the Performance of Speech Recognition.....	91
<i>Jin Ah Kang, Seung Ho Choi</i>	
A Speaking Rate Normalization Method Using Time-Scale Modification for Speech Recognition .....	95
<i>Jin Ah Kang, Seung Ho Choi</i>	
A Study on the Momentum according to the Position of a User's Smart Phone...	98
<i>Shin-Hyeong Choi</i>	
Nano Technology Convergence and Gyeongnam's Project.....	101
<i>Sang-Rae Suh, Shin-Hyeong Choi</i>	
The Fungi Prediction Method using Wireless Sensor Networks .....	105
<i>Shin-Hyeong Choi</i>	
The Structural Study of 100-Seater Lifeboat .....	109
<i>Joo-Hyoung Choi, Jung-Hwan Kim, Jae-Hyun Park, Shin-Hyeong Choi</i>	
A Study on Convergence Technology for Building of Smart City.....	113
<i>Seong-Yong Lee, Kwang-Youn Jin, Shin-Hyeong Choi</i>	
Introduction to Drillship Flare System using Computational Analysis .....	117
<i>Joo-Hyoung Choi, Shin-Hyeong Choi</i>	
The Prevention Method of Surface Condensation using USN .....	121
<i>Shin-Hyeong Choi</i>	
A Study on Smart User Interface Platform of Industrial Equipment using Shader Effects.....	124
<i>Cheol-Gon Moon, Shin-Hyeong Choi</i>	
Improving Usability of Educational Resources by Annotation Mechanism.....	128
<i>Jae-Kyung Kim, Won-Sung Sohn, Kyung Hur, YangSun Lee</i>	
Multi-hop Wireless Body Area Network Design for WUSB support in Wireless Home Networks .....	131
<i>Kyeong Hur, Won-Sung Sohn, Jae-Kyung Kim</i>	

Ranging Middleware Design for Body Sensor Networks .....	135
<i>Kyeong Hur, Won-Sung Sohn, Jae-Kyung Kim</i>	
Software Quality Contents: What and How to learn.....	139
<i>Sunnyung Hwang, Soysambocheyear, Heegyun Yeom</i>	
QoS-Guaranteed Spectrum Handover Algorithm for Heterogeneous Wireless Networks.....	143
<i>Juwon Kim, Longzhe Han, Geunhyung Lee, Hoh Peter In</i>	
Measurement Analysis for Handover Decision Procedure in a High-Speed Railway LTE System of High-Speed Railway .....	147
<i>Jungjin Choi, Longzhe Han, Byungsik Yoon, Hoh Peter In</i>	
Consideration Factors for the Efficient Deployment of Wireless Sensor Nodes .....	152
<i>Dae-Young Kim, Byung-Ho Ahn, Kuk-Hyun Cho</i>	
Method for managing a variety of sensor information .....	156
<i>Dae-Young Kim, Si-Ho Cha, Kuk-Hyun Cho</i>	
A Study on Improving the Reliability of Sparse M2M Environment.....	160
<i>Doo-Ok Seo, Dong-Ho Lee</i>	
Design of HTML5 based Virtual Reality 3D Web .....	164
<i>Dongxu Yang, Yoemun Yun, Si-Ho Cha</i>	
Research on Approach Method using Map Information from SmartPhone .....	168
<i>Taeun Kim, Hyun Hahm, Moonseog Jun</i>	
Research on Access control Method by User Authority using Two-Factor Authentication.....	172
<i>Keunwang Lee, Haeseok Oh</i>	
A Study on Environmental Monitoring using Sensors for Cold Chain System.....	176
<i>Changsoo Lee, Daewon Jung, Keunwang Lee</i>	
A Design of Authentication Strengthening Scheme using matrix values of Image in Smart Phone Environment.....	179
<i>HyeonHong-Kim, KilHun-Lee, YongHoon-Jung</i>	

A Study on the Automatic Emergency Alert Broadcast using a Coordinates Techniques in an T-DMB System.....	183
<i>Kil-Hun Lee , Moon-Seok Jun, Hyeon-hong Kim</i>	
A Study on Membership Certification and Customized Information Service Using RFID Tag.....	187
<i>YongHoon Jung, Kwang-Hyoung Lee</i>	
A Study on Photovoltaic Generation Model in Gangwon Youngdong Province through Data Analysis .....	191
<i>Bong Sub Lee, Shin-Hyeong Choi</i>	
The Construction Method of Industrial Complex based on Environmental Impact Assessment .....	195
<i>Byoung-Young Ahn, Jung-Man Kim, You-Hyun Kim, Shin-Hyeong Choi</i>	
Location Estimation using Extended Kalman Filter in CSS WPAN .....	199
<i>Yoon-Seok Nam</i>	
A Study on Smart Home Power-Control System with Power-Saving Green Adapter .....	203
<i>Seung-Jae Yoo, Hee-Dong Park, Song-Gang Kim</i>	
High Performance On-Demand Data Pumping for Digital Micromirror Device Interface .....	207
<i>Hee-Dong Park</i>	
Efficient Detection of First Races for Parallel Programs with Random Synchronization .....	211
<i>Hee-Dong Park, In-Bon Kuh, Yong-Kee Jun</i>	