

2012 IEEE Ninth International Conference on e-Business Engineering

(ICEBE 2012)

**Hangzhou, China
9-11 September 2012**



**IEEE Catalog Number: CFP12EBE-PRT
ISBN: 978-1-4673-2601-8**

2012 Ninth IEEE International Conference on e-Business Engineering

ICEBE 2012

Table of Contents

Message from the ICEBE 2012 Chairs.....	x
Message from the ICEBE 2012 Program Chairs.....	xi
Organizing Committee.....	xiii
Program Committee.....	xv
Message from the SOAIC 2012 Workshop Co-chairs.....	xix
SOAIC 2012 Workshop Co-chairs and Program Committee.....	xx
Message from the EM2I 2012 Workshop Co-chairs.....	xxi
EM2I 2012 Workshop Co-chairs and Program Committee.....	xxii
Message from the SOKMBI 2012 Workshop Co-chairs.....	xxiii
SOKMBI 2012 Workshop Co-chairs and Program Committee.....	xxiv
Message from the ASOC 2012 Workshop Chairs.....	xxv
ASOC 2012 Workshop Chairs and Program Committee.....	xxvi
Keynotes.....	xxvii

Session EBE01: Data and Knowledge Management for e-Business I

Probabilistic Top-k Dominating Composite Service Selection	1
<i>Chaogang Tang, Shiting Wen, Qing Li, Yan Xiong, and An Liu</i>	
Personalized Recommendation Based on Reviews and Ratings Alleviating the Sparsity Problem of Collaborative Filtering	9
<i>Jingnan Xu, Xiaolin Zheng, and Weifeng Ding</i>	
k*NNCA: A Location Privacy Preserving Method for Semi-honest Mobile Users	17
<i>Xiao Pan, Lei Wu, and Chunhui Piao</i>	
Research on Trust Evaluation Model for Mobile Commerce Based on Structural Equation Modeling	25
<i>Chunhui Piao, Shuzhen Wang, and Fengtao Yang</i>	

Session EBE02: Data and Knowledge Management for e-Business II

The Impact of Online Channel on the Performance of China's Listed Retailers	33
<i>Shao Bing-Jia and Ning Bei-Bei</i>	

An Empirical Study of Customer Loyalty to Internet Banking in China	39
<i>Yongbing Jiao, Jian Yang, and Zhanfeng Zhu</i>	
A New Selective Clustering Ensemble Algorithm	45
<i>Liu Limin and Fan Xiaoping</i>	
A Parameter Model of Genetic Algorithm Regulating Ant Colony Algorithm	50
<i>Wu Liu-ai and Fan Wen-Qing</i>	
An Interval Fuzzy Ontology Based Peer Review Assignment Method	55
<i>Na Xue, Jin-Xing Hao, Su-Ling Jia, and Qiang Wang</i>	
Session EBE03: Software Engineering for e-Business	
A Highly Concurrent Process Virtual Machine Based on Event-driven Process Execution Model	61
<i>Dongyao Wu, Jun Wei, Chushu Gao, and Wenshen Dou</i>	
S/T/A: Meta-Modeling Run-Time Adaptation in Component-Based System Architectures	70
<i>Nikolaus Huber, André van Hoorn, Anne Koziolok, Fabian Brosig, and Samuel Kounev</i>	
A Core Broking Model for E-Markets	78
<i>Pen-Choug Sun, Michael Odetayo, Rahat Iqbal, and Anne James</i>	
Semantic Consistency Maintenance in Editing Cross-Context Common Vocabulary	86
<i>Jingzhi Guo and Lok Ham Lam</i>	
Session EBE04: Service Engineering	
Building an Optimal Service Environment for ASBS Based on Pareto Dominance	95
<i>Hang Song, Jun Na, Bin Zhang, Jun Guo, and Zhi-Liang Zhu</i>	
Managing Service Reputation with Vague Sets	103
<i>Ping Wang</i>	
Data Providing Web Service Selection Using Bayesian Network	111
<i>San-Yih Hwang, Yi-Hsuan Hsieh, and Chien-Hsiang Lee</i>	
An Empirical Study on Meta-Heuristic Search-Based Web Service Composition	117
<i>Chengying Mao, Jifu Chen, and Xinxin Yu</i>	
Design and Implement of SOA-based Bridge Monitoring System Data Layer	123
<i>Wendi Gao, Meina Song, and Ke Xu</i>	
Session EBE05: Integration and Industrial Applications	
Do We Have Tools for Developing Green Applications? - IDE Tool with Power Management Computation Plugin	128
<i>Tina Ho, Rebecca Chen, and Jerry Chang</i>	
A Transformation Process Model for Chinese Enterprises to the Platform-Based B2B e-commerce	133
<i>Zhu Zongyao, Fu Cuixiao, and Meng Haihua</i>	

The Business Model Ontology for Web 2.0 Websites	139
<i>Yun Liu</i>	

Linear Modelling and Optimization to Evaluate Customer Satisfaction and Loyalty	145
<i>Alireza Faed, Omar K. Hussain, Mehdi Faed, and Zahra Saberi</i>	

Session EBE06: Security, Privacy and Open Source

HB-MAP Protocol: A New Secure Bidirectional Light-Wight Authentication Protocol of HB	151
<i>Fangtian Hou, Cheng Yang, Jianbo Liu, Yichun Zhang, Jiayin Tian, and Yakun Zhang</i>	

Combinatorial Mutation Approach to Web Service Vulnerability Testing Based on SOAP Message Mutations	156
<i>Qing Li, Jinfu Chen, Yongzhao Zhan, Chengying Mao, and Huanhuan Wang</i>	

A Policy-Based Architecture for Web Services Security Processing	163
<i>Hao Zeng, Dianfu Ma, Zhuqing Li, and Yongwang Zhao</i>	

Unified Threat Management System Approach for Securing SME’s Network Infrastructure	170
<i>Saqib Ali, Maitham H. Al Lawati, and Syed J. Naqvi</i>	

Session EBE07: Security and Business Analytics

Methodology and Tool Design for Building Return on Investment Models for IT Transformations	177
<i>Chang-Shing Perng and Rong Chang</i>	

Value-Added Analysis of Bi-Lateral e-Business Services	185
<i>Zhongjie Wang, Qian Wu, and Xiaofei Xu</i>	

User-Controlled Dynamic Access Credential Enrichment for Run-time Service Selection	193
<i>Christoph Fritsch and Günther Pernul</i>	

The Research of a Multi-Factor Dynamic Authorization Model	201
<i>Jing Liu, Chao Liu, Dongliang Jiao, and Jiaopeng Chen</i>	

SecEPM: A Security Engineering Process Model for Electronic Business Processes	206
<i>Jörn Eichler</i>	

Session EBE08: Mobile Commerce

CloudExplorer: A User-Centered Cloud Browser for Cloud Services	214
<i>Yinsheng Li, Jiao Li, Feng Zhou, Yong Fang, and Hao Chen</i>	

A Ubiquitous Clinic Data Accessing Method Based on Resource Model	221
<i>Lihong Jiang, Boyi Xu, Lu Fang, and Hongming Cai</i>	

An Empirical Study of User Behavioral Intention to Accept of Mobile TV: An Integration of TAM with Entertainment	227
<i>Chuncaí Lin, Hailan Gu, and Yanpeng He</i>	

Studying Applications and Evaluation on the Next Generation Services of Broadband Communication	232
<i>Weidong Fang, Guoqing Jia, and Jingyan Mo</i>	
Session EBE09: Cloud Computing	
Approximate Keyword-based Search over Encrypted Cloud Data	238
<i>Ayad Ibrahim, Hai Jin, Ali A. Yassin, and Deqing Zou</i>	
IaaS Cloud Selection using MCDM Methods	246
<i>Zia ur Rehman, Omar K. Hussain, and Farookh K. Hussain</i>	
Dynamic Selection of Services under Temporal Constraints in Cloud Computing	252
<i>Yanhua Du, Xiaofei Wang, Lifeng Ai, and Xitong Li</i>	
A Fault Detection Method for Wireless Sensor Networks Based on Credible Sensor Nodes Set	260
<i>Zhaoxing Wang, Qiaoyan Wen, Teng Wang, and Hua Zhang</i>	
Session EBE10: Cloud Computing and Services	
Design Dynamic Data Allocation Scheduler to Improve MapReduce Performance in Heterogeneous Clouds	265
<i>Shin-Jer Yang, Yi-Ru Chen, and Yung-Ming Hsieh</i>	
Resource Oriented Composite Transactions	271
<i>Rui Liu and Xin Sheng Mao</i>	
Gossip-based Hybrid Multi-attribute Overlay for Resource Discovery in Federated Clouds	279
<i>Guan Le, Ke Xu, and Junde Song</i>	
Automation System for Validation of Configuration and Security Compliance in Managed Cloud Services	285
<i>Trieu C. Chieu, Manas Singh, Chunqiang Tang, Mahesh Viswanathan, and Ashu Gupta</i>	
A QoS Evaluation Model for Test-Bed in the Cloud Computing Environment	292
<i>Jundian Song, Shaohua Zhang, Yanxue Gong, and Bingrong Dai</i>	
Sesison EBE11: e-Marketplace Integration and Interoperability (EM2I)	
A Survey of P2P Virtual World Infrastructure	296
<i>Bingqing Shen, Jingzhi Guo, and Philip Chen</i>	
Transport Hub-and-spoke Network Optimization Model Construction of Pharmaceuticals Cold-chain Logistics	304
<i>Li Dongjiu, Li Hao, Zhang Qingnian, and Wang Jiali</i>	
Computing Resources Market in Grid and Cloud Based on Contract Management	308
<i>Yinghua Sun, Zehui Wu, Guanfeng Liu, and Zhenkuan Pan</i>	
A Scalable and Elastic Business Event Processing System	313
<i>Ming Li and Liangzhao Zeng</i>	

Session EBE12: Service-Oriented Applications, Integration and Collaboration (SOAIC)	
A RFID-Based Kindergarten Intelligence Security System	321
<i>Zhiyuan Fang, Li Wei, Wei Chen, and Yangjun He</i>	
Cyber-Physical System Components Composition Analysis and Formal Verification Based on Service-Oriented Architecture	327
<i>Peng Wang, Yang Xiang, and Shao Hua Zhang</i>	
Personalized Travel Service Discovery and Usage in Cloud Environment	333
<i>Feng Zhou, Yong Fang, and Hao Chen</i>	
Efficient Usage of Network Bandwidth in the Cloud Architecture	338
<i>Rick C.S. Chen, Chung-Ting Kao, and Hui-Kuang Chung</i>	
PLASH: An ESB-based Platform for Developing and Deploying Location Aware Services with SOC Concepts	344
<i>Yi Chun Teng, Fu Ming Huang, Yu Hsiang Huang, and Meng Chang Chen</i>	
Session EBE13: Service-Oriented Knowledge Management and Business Intelligence (SOKMBI)	
A Checking Consistency Framework Based on Multi-View Models Towards Business Process Model Repository	350
<i>Lei Sun, Hongming Cai, and Lihong Jiang</i>	
Mining Contextual Knowledge for Context-Aware Recommender Systems	356
<i>Wenping Zhang, Raymond Lau, and Xiaohui Tao</i>	
An Advanced Rapid Alert System for Food Safety	361
<i>Whisker T.Y. Law, Dickson K.W. Chiu, Haiyang Hu, Yi Zhuang, and Hua Hu</i>	
VMFDF: A Virtualization-based Multi-Level Fault Detection Framework for High Availability Computing	367
<i>Jianhua Zhang, Wenbo Zhang, Heng Wu, and Tao Huang</i>	
Author Index	374