



- **Welcome**
- **News**
- **Call for Papers**
- **Keynotes**
- **Committee**
- **PC Members**
- **Important Dates**
- **Program**
- **Submission**
- **Accepted Papers**
- **Registration**
- **Accommodation**
- **Travel**
- **Tours**
- **Past Events**



Scope of Conference

Design of complex artifacts and systems requires the cooperation of multidisciplinary design teams. The Fourteenth International Conference on Computer Supported Cooperative Work in

Design (CSCWD 2010) provides a forum for researchers and practitioners involved in different but related domains to confront research results and discuss key problems. The major topics include, but are not limited to:

- Techniques, methods, and tools for CSCW in design
- Knowledge intensive cooperative design
- User modeling for cooperative design
- Agents and multi-agent systems for cooperative design
- Workflows for cooperative design
- VR technologies for cooperative design
- Grids, Web services and semantic Web for cooperative design
- Mobile collaboration and applications
- Collaborative networks and applications
- Collaboration in manufacturing, services, and businesses
- Distance learning/training related to design
- Practice and experience with collaborative systems
- Other areas related to CSCW in design

Submission of Papers

Papers reporting original research results and experience are solicited. Each paper, written in English, is limited to 6 pages ([IEEE proceedings format](#)), including references and illustrations. Electronic submissions in PDF format are strongly recommended. Submission of a paper should be regarded as an undertaking that, should the paper be accepted, at least one of the authors will attend the conference to present the paper.

Submission Web Site: <http://cscw.fudan.edu.cn/CSCWD2010/submission.htm>

Publication

All submitted papers will be reviewed by program committee members and selected based on their originality, significance, relevance, and clarity of presentation. Accepted papers will be published in the IEEE categorized conference proceedings and will be submitted for indexing to EI (Compendex), DBLP (<http://dblp.uni-trier.de/db/conf/cscwd/index.html>) and other indexing services. Authors of selected papers will be invited to submit revised and expanded version of their papers to be considered for publication in special issues of well-known international journals.

Information about the International Working Group on CSCW in Design and previous conferences/workshops can be found at: <http://www.cscwd.org/>.

Organized by

**Proceedings of the
2010 14th International Conference on
Computer Supported Cooperative Work in Design**

April 14-16, 2010, Fudan University, Shanghai, China

Edited by:

Weiming Shen, Ning Gu, Tun Lu, Jean-Paul Barthès, Junzhou Luo

IEEE Catalog Number: **CFP10797-ART**
ISBN: **978-1-4244-6763-1**

© 2010 IEEE. Personal use of this material is permitted. However, permission to reprint/republish this material for advertising or promotional purposes or for creating new collective works for resale or redistribution to servers or lists, or to reuse any copyrighted component of this work in other works must be obtained from the IEEE.

Technical inquiries should be sent to:
Dr. Weiming Shen
Phone: +1 519 430-7134, Fax: +1 519 204-0145, E-mail: wshen@ieee.org

©2010 IEEE

Table of Contents

Keynotes

- Operational Transformation: Research and Application 1
Chengzheng Sun
- High Quality-Oriented Product Cooperate Design in the Virtual Environment 2
Jianrong Tan

CSCWD Techniques, Methods, and Tools

- Transformation of Operation Commands among CAD Systems in Synchronized Collaborative Design 1
Wanfeng Dou, Xiaodong Song, Tao Peng
- A Conversation Model of Collaborative Pair Programming Based on Language/action Theory 7
Wanfeng Dou, Kui Hong, Wei He
- Design and Research on GeoIP 13
Fang Dong, Cheng Chengqi, Guo Shide
- Learning to Rank with a Weight Matrix 18
Zewu Peng, Yong Tang, Luxian Lin, Yan Pan
- A Cooperative Method for Supervised Learning in Spiking Neural Networks 22
Hong Shen, Ning Liu, Xiaoping Li, Qian Wang
- Load Identification in Nonintrusive Load Monitoring Using Steady-State and Turn-on Transient Energy Algorithms 27
Hsueh-Hsien Chang, Ching-Lung Lin, Jin-Kwei Lee
- A Framework of Awareness for Collaborative e-Commerce 33
Qingzhang CHEN, Yan JIN, Peng WANG
- Group Animation Path Generation Based on Particle Swarm Optimisation 37
Hong Liu, Shijie Xu
- Research on an Analysis Method for Software Trustworthiness Based on Rules 43
Tie Bao, Shufen Liu, Lu Han

A Inter-Block 4-Erasure-Correcting Scheme for Reliable Transmission of Large Data Blocks	48
<i>Shi-Le Zhang, Wei Qin, Song-Wen Pei, Bai-Feng Wu</i>	
A Multi-User Location-Awareness System	53
<i>Rahat Iqbal, Anne James, Witold Poreda, John Black</i>	
Using a Metamodel to Design Structural and Behavioral Aspects in Context-Sensitive Groupware	59
<i>Vaninha Vieira, Patricia Tedesco, Ana Carolina Salgado</i>	
Shared Design Thinking Process Model for Supporting Collaborative Design	65
<i>Junpeng Du, Shikai Jing, Jihong Liu</i>	
A Formalizing Hybrid Model Transformation Approach for Collaborative System	71
<i>Kun Ma, Bo Yang, Haiyang Wang</i>	
CSCW Implementation in Enterprise. The NIBBLING Method	77
<i>Philippe Vigié, Pascale Zaraté, Jean-Luc Soubie</i>	
Coordination and Pressing: A Formula for Teamwork - A Case Study	83
<i>Maira Marques, Sergio F. Ochoa, Alcides Quispe, Luis Silvestre, Agustin Villena</i>	
A New Collaboration Design Method Based on Dependency in Electrical Domain	89
<i>Xinyin Wang, Huaiyu Wang, Quan Sheng Shi, ShaoHua Zhang</i>	
Green Quality Function Development and Modular Design Structure Matrix in Product Development	94
<i>Chung-Shing Wang, Pei-Yau Lin, Teng-Ruey Chang</i>	
A GPU-based Computing Framework for CSCW	100
<i>Gang Chen, Guobo Li, Baifeng Wu, Songwen Pei</i>	
A Less Constraint Concurrency Control and Consistency Maintenance In Collaborative CAD System	104
<i>Huajun Liu, Xiaoxia Li, Fazhi He, Zhiyong Huang</i>	
Specify and Enforce the Policies of Quantified Risk Adaptive Access Control	110
<i>Chen Chen, Weili Han, Jianming Yong</i>	
Improving Requirements Engineering Processes in Very Small Software Enterprises Through the Use of a Collaborative Application	116
<i>Sergio F. Ochoa, Alcides Quispe, Andrés Vergara, José A. Pino</i>	

On-demand Late Join for Collaborative Graphics Editing Systems in Ubiquitous Environment	122
<i>Bo Jiang, Jiale Wang</i>	
Team Composer: Assembling Groups through Social Matching	128
<i>Flavia E.O. Silva, Claudia L.R. Motta, Flávia Maria Santoro</i>	
ARARA - A Collaborative Tool for Requirement Change Awareness	134
<i>Ester J. C. de Lima, José A. Rodrigues Nt., Geraldo B. Xexéo, Jano M. de Souza</i>	
A Cooperative Network Intrusion Detection Based on Heterogeneous Distance Function Clustering	140
<i>Shaohua Teng, Hongle DU, Wei Zhang, Xiufen Fu, Xiaocong Li</i>	
A Double Interval Centroid-Based Watermark for Network Flow Traceback	146
<i>Xiaogang Wang, Junzhou Luo, Ming Yang</i>	
Design Evaluation by Neural Trees	152
<i>Xiyu Liu, Feng Qi</i>	
A Method of Evaluating Collaboration Satisfaction Degree of NPD Team	156
<i>Lv Jun, Li Ya-feng</i>	
Collaborative Quality-of-Service based Video Conferencing	161
<i>Christian Spielvogel, Peter Kropf</i>	
A Framework for Privacy Policy Management in Service Aggregation	166
<i>Peishun Wang, Liju Dong, Yi Mu, Willy Susilo, Jun Yany</i>	
A MVC-based Collaborative Framework Support for Test Suite	172
<i>Zhenyu Liu, Ting Li, Genxing Yang</i>	
A Study and Design of Plug-in Framework Based on .NET Component Technology	178
<i>Yuyu Sun, Liang Hu, Kuo Zhao</i>	
Workflows for Cooperative Design	
A Knowledge-based Adaptive Collaborative Work System Implementation Framework	184
<i>Xianghui Wang, Jian Zhang, Qian Sun</i>	

Multi-granularity Business Process Descriptions and Intelligent Task Distribution	190
<i>Chunsheng Hu, Chengdong Xu</i>	
SMART: A Platform for Cross-Domain Business Process Collaboration	195
<i>Ningning Mao, Lizhen Cui</i>	
A Business Process Modeling Approach Based on Semantic Event-driven Process Chains	201
<i>Tianyang Dong, Hongming Cai, Boyi Xu</i>	
A Process-oriented Configurable Workflow System Model for Cooperative Project Management	207
<i>Yi Chen, Jile Xin</i>	
Test Coverage for Collaborative Workflow Application based on Petri Net	213
<i>Zhenyu Liu, Tiejiang Liu, Lizhi Cai, Genxing Yang</i>	
Knowledge Management for Cooperative Design	
A Study on Performance Evaluation Model of Individual Knowledge-sharing	219
<i>Lijun Song, Licun Wang, Ningyu Zhao</i>	
Study of Ontology Technology in Field Word Segmentation System of Digital Library	223
<i>Lizhen Liu, Chengli Wang, Lin Bai, Hai Chen</i>	
A Frame-based Ontological View Specification Language	228
<i>Yunjiao Xue, Hamada H. Ghenniwa, Weiming Shen</i>	
Web Information Extraction Based on Hidden Markov Model	234
<i>Jianbing Lai, Qiang Liu, Yi Liu</i>	
An approach on Business Process Ontology for CSCW Using PSL	239
<i>Wenan Tan, Fujun Yang, Weiming Shen</i>	
Knowledge Element Relation Extraction Using Conditional Random Fields	245
<i>Yingying Chen, Qinghua Zheng, Wei Wang, Yan Chen</i>	
Qualitative Analysis of a Social Knowledge Management Initiative in an Innovation Institute	251
<i>Ricardo A. Costa, Silvio R. L. Meira, Paulyne M. Jucá, Rafael A. Ribeiro</i>	

Collaborative Geo-referenced Knowledge Creation for Designing and Planning <i>Gustavo Zurita, Nelson Baloian</i>	257
Applying the BPANN and the Hierarchical Ontology to Develop a Methodology for Binary Knowledge Document Classification and Content Analysis <i>Tzu-An Chiang, Chun-Yi Wu, Amy J. C. Trappey, Charles V. Trappey.</i>	263
Dialog Construction in a Collaborative Project Management Environment <i>Milton P. Ramos, Cesar A. Tacla, Gilson, Emerson C. Paraiso, Jean-Paul A. Barthès</i>	269
 Agents and Multi-agent Systems for Cooperative Design	
Study on Collaborative Product Design Based on Modularity and Multi-agent <i>Ming Chen, Jinfei Liu, Qinghua Kong</i>	274
Cluster Supply Chain Cooperation based on Multi-agent <i>Feipeng Huang, Xiangyang Li</i>	280
Application of Ontological Thought in Collaborative Product R & D Oriented to Automobile Lifecycle <i>Ming Chen, Jinfei Liu, Qinghua Kong, Yuan Yao</i>	286
Bidirectional Selection Cooperation Approach Based on Multi-Agent <i>Xuan Wang, Jing-long Yan</i>	291
Real-time Task Scheduling Behavior in Agent-based Product Development Process Simulation <i>Xiaodong Zhang, Jianwei Wang, Le Luo, Yingzi Li</i>	295
The Design and Implement of Internet Intelligence Agent in Electronic Commerce Environment <i>Qingzhang CHEN, Xiaomei TANG, Shuojin FANG</i>	300
A Cooperative Design Framework Based on Multi-Agent for Aircraft Structural Parts <i>Hai Li, Yingguang Li, Wei Wang, Changqing Liu</i>	306
The Research and Improvement on the Coordinated-Negotiation Architecture of Web Service Composition based on Agent in the Condition of Multi-Negotiation Concurrency <i>Bin Wu, Chaozhen Guo</i>	312

An Agent-Based Architecture for Knowledge Management in Context-Aware Business Processes	318
<i>Leonardo A. de C. Gatti, Flávia Maria Santoro, Vanessa T. Nunes</i>	
Modeling of Container Terminal Logistics Operation System Based on Multi-Agents	324
<i>Ye Zhong, Wenfeng Li, Bin Li</i>	
Grids, Web services and Semantic Web for Cooperative Design	
A Collaborative Trust Model of Firewall-through based on Cloud Computing	329
<i>Zhimin Yang, Lixiang Qiao, Chang Liu, Chi Yang, Guangming Wan</i>	
A Lightweight Semantic Framework Towards Collaborative Development and Integration of Enterprise Applications	335
<i>Yi Jiao, Lin Li, Nanrong Ye</i>	
SOA-based Method for Cooperative Tasks Distribution in Large-scale Optimization Environments	340
<i>Qiuxiang Cui, Xia Zhu, Yi Zhang, Xiaoping Li</i>	
Semantic-based Self-organising Mechanism for Service Registry and Discovery	345
<i>Jiuxin Cao, Yi Yao, Xiao Zheng, Bo Liu</i>	
An Impact Analysis Model For Distributed Web Service Process	351
<i>Mi Wang, Lizhen Cui</i>	
Research on Collaborative Design Platform of Launch Vehicle Based on Desktop Grid	356
<i>Hao-long ZHANG, Hong-tao ZHENG, Wen ZHAO, Xin LIAO, Zhi-ting FEI</i>	
An Extension of GridSim for Quality of Service	361
<i>Reda Albodour, Anne James, Norlaily Yaacob</i>	
On the Trusted Ontology Model for Evaluating the Semantic Web Services	367
<i>Ming Qu, Shufen Liu, Tie Bao</i>	
The Service-Oriented Architecture of Virtual Enterprise for Manufacturing Industry	373
<i>Wei Cui, Xiangxu Meng, Shijun Liu</i>	
Applying a Model-Driven Process for a Collaborative Service-Oriented Architecture	378
<i>Cristiana Pereira Bispo, Rita Suzana P. Maciel, José Maria N. David, Ítalo Ribeiro, Renato Conceição</i>	

A Service-Oriented Travel Portal with Semantic Package Recommender	384
<i>Yinsheng Li, Mu Zhu, Han Chen, Kuo-Ming Chao</i>	
An Optimization Approach for Service Deployment in Service Oriented Clouds	390
<i>Tiejiang Liu, Tun Lu, Zhenyu Liu</i>	
Resource Scheduling Based on Dynamic Dependence Injection in Virtualization-based Simulation Grid	396
<i>Hanbing Liu, Hongyi Su, Shouyi Zhan, Xundong Chai, Yabin Zhang, Baocun Hou, Linqin</i>	
Data Aggregation based Adaptive Long Term Load Prediction Mechanism in Grid Environment	402
<i>Fang Dong, Junzhou Luo, Jinhui Zhang, Aibo Song, Jiuxin Cao</i>	
MARDO: A Novel Schema of Dynamic QoS Optimizing for Composite Web Services Using Cooperative Agents	408
<i>Jia jun Wang, Jie Wu, Yu Wu, Shiyong Zhang</i>	
Novel Algorithm for Load Balancing in Cluster Systems	413
<i>Wenzheng Li, Hongyan Shi</i>	
VR Technologies for Cooperative Design	
Virtual Robot Program Development for Assembly Processes using Rigid-Body Simulation	417
<i>Mario Rossdeutscher, Michael Zuern, Ulrich Berger</i>	
VRML Based Collaborative CAM Simulation Environment	423
<i>Ziqiang Zhou, Yi Pan, Lie Ma, Liguan Shen, Wei Zhao</i>	
Construction of Virtual Experiment Platform for Research about Vehicle Driving Control at Energy-saving	427
<i>Niandong Yin, Ping Xia, Jing Tao</i>	
Effects of Information Exchange Channels in Different Communication Modes on Trust Building in Computer-mediated Remote Collaborative Design	432
<i>Lu Wang, Xiangyu Wang</i>	
Virtual Reality in the Substation Training Simulator	438
<i>Wenju Wang, Guangyao Li</i>	

Mobile Collaboration and Applications

Reliability Research of Wireless Sensor Network Node 444

Shuxia Pan, Bingbing Ji, Yali Luan

Constraint-based Sensor Network Nodes Particle Swarm Search Localization Algorithm 448

Shu-wang Zhou, Ying-long Wang, Qiang Guo, Wei Nuo

Based Deviation-optimal by Using Kalman Filter Algorithm in Receiver-Only Time Synchronization for Wireless Sensor Networks 452

Wen-juan Guo, Ying-long Wang, Wei Nuo, Qiang Guo

R&D Process Programming for Series EGR Sensor Based on Virtual Molding and Parametric Design 457

Tianhu Liu, Zhihui Liang, Shenbo Liang, Xinnian Qin, Ping Fu

Designing Mobile Interaction to Elicit Alternative Solutions for Participatory Decision-making 461

Ana Cristina B. Garcia, Adriana S. Vivacqua, Thiago C Tavares

Enhancing Mobile Collaboration with HLMP 467

Juan Rodriguez-Covili, Sergio F. Ochoa, José A. Pino

Dynamic Data Driven Smart Home System based on a Service Component Architecture 473

Chi-Chun Lo, Ding-Yuan Chen, Kuo-Ming Chao

HLMP API: A Software Library to Support the Development of Mobile Collaborative Applications 479

Juan Rodríguez-Covili, Sergio F. Ochoa, José A. Pino, Roc Messeguer, Esunly Medina, Dolors Royo

Mobile Multi-robots Formation Control and its Implementation 485

Shuqin Li, Qiwei Zhao, Xiaohua Yuan

Design and Implementation of Multi-robot Cooperative Tracking 490

Shuqin Li, Le Zhang, Xiaohua Yuan

Practice and Experience with Collaborative Systems

Research and Application of Conflict Detection Technology in Machinery Collaborative Design 495

Hanmei Chen, Yinzhang Guo

Layered Document Model Transformation and Operation Adaptation of Two Dimensional CAD Environments	500
<i>Liping Gao, Tun Lu</i>	
Application of Collaborative Simulation Based on Interfaces for Dynamic Properties of an Engine's Mechanical System	506
<i>Wenjie Qin, Zhihui Li, Xiongjiang Zhou</i>	
Implementation of Collaborative Design System upon Heterogeneous CAD Systems Using a Feature-based Mapping Set	510
<i>Xiaodong Song, Wanfeng Dou, Jun Zhu</i>	
Multi-layers Process Modeling for Complex Machinery Products Collaborative Design	516
<i>Yin-zhang GUO, Jian-chao ZENG</i>	
CAD Software Development for Planet Carrier Design	521
<i>Sizhu Zhou, Ming Chen, Jian Hua, Huabin Jin, Chao Li</i>	
A Hierarchical Hybrid Strategy for Reliability Analysis of Multidisciplinary Design Optimization	525
<i>Liansheng Li, Shikai Jing, Jihong Liu</i>	
Research of Configuration Management In Complex Equipment Collaborative R&D	531
<i>Dingyong TANG, Zheng CHENG, Dongmei XIE, Yizhen TAO</i>	
The Strategies of New Product Design System for Small Series Production	536
<i>Chen-Fang Tsai, Anne James, Weidong Li</i>	
An Effective Interaction Control Mechanism with Minor Step for Multidisciplinary Collaborative Simulation System	542
<i>Heming Zhang, Pengfei Cui, Hongwei Wang</i>	
Collaborative 3D CAD System for Multiple User Design	548
<i>Lianguan Shen, Heng Liu, Mujun Li, Yu Hao, Meiyang Wang, Jian Li, JinJin Zheng</i>	
Retrieval and Reconstruction of Heterogeneous Feature Data for Collaborative Design	553
<i>Xiaoxia Li, Fazhi He, Xiantao Cai, Zhiyong Huang</i>	

Collaboration in Manufacturing, Services, and Businesses

Information Integration and E-Commerce System Construction for Taiwan Traditional Industrial Production	559
<i>Ping-Hong Kuo, Yao-Tsung Ko, Hui-Shan Huang</i>	
Task-oriented BOM Conversion and View Mapping	565
<i>Xiaojun Meng, Xu Zhang, Ruxin Ning, Aimin Wang</i>	
The Real-time Dynamic Heuristic Scheduling for Complex Production Planning	569
<i>Yiping Yuan, Wenlei Sun, Ying Zhu</i>	
Research on Dynamic Response of Historic Timber Structure with Platform-Foundation under Metro-induced Loads	574
<i>Xin Wang, Zhaobo Meng</i>	
Digital Factory for Collaborative Supply Chains	579
<i>Michel Pouly, Sébastien Berthold</i>	
Large Groups Decision for the Rio 2016 Olympic Games in the MUTIRÕ Project	585
<i>Sergio Palma J. Medeiros, Jano Moreira de Souza, Gustavo Carvalho, Erick Alves Rezende</i>	
Public Service Platform Supporting Collaboration of Motor Die Manufacturing	590
<i>Yuming Zhu, Shikai Jing, Jihong Liu</i>	
AgendaBuilder: a System to Support Meeting Design	596
<i>Adriana S. Vivacqua, Marcos S. Ferreira, Jano M. de Souza</i>	
Architecture of a Distributed Framework for a Fleet Command and Control System	602
<i>Shufen Liu, Peng Xu, Xiaojun Li</i>	
A Dynamic Critical Path Computation Algorithm for Enterprise Process Cooperative Scheduling	606
<i>Fujun Yang, Wenan Tan, Weiming Shen, Hamada H. Ghenniwa, Yunjiao Xue</i>	
A Case Study on Designing Business Processes Based on Collaborative and Mining Approaches	611
<i>João Carlos de A.R. Gonçalves, Flávia Maria Santoro, Fernanda Araujo Baião</i>	
Recommender System for Contextual Advertising in IPTV Scenarios	617
<i>Roberto Konow, Wayman Tan, Luis Loyola, Javier Pereira, Nelson Baloian</i>	

Collective Intelligence for the Design of Emergency Response	623
<i>Adriana S. Vivacqua, Marcos R.S. Borges</i>	
Context-Aware Scheduling of Workforce for Multiple Urgent Events	629
<i>Yuqing Sun, Dickson K. W. CHIU</i>	
Multi-site Collaboration Design for Air Cargo Planning	635
<i>Pearl C. C. Shum, Vincent T.Y. Ng</i>	
 Distance Learning / E-Learning	
The Study of Collaborative Learning Grouping Strategy in Intelligent Tutoring System	642
<i>Lizhen Liu, Lei Chen, Cuixia Shi, Hai Chen</i>	
A Study on Academic Performance and Interpersonal Interactions Based on Network	647
<i>Jianhua Han, Jikui Wen, Xiaojun Zhao</i>	
Research on Network Learning Behavior Evaluation Model	653
<i>Suxian Lin, WenAn Tan, Junfeng Song</i>	
A Method for Large Cross-Language Lexicon Management Based on Collaborative Work of Hash Family and Double-Array Trie	658
<i>Cheng Zheng, Qinghua Zheng, Zheng Zhou, Feng Tian</i>	
Mining Patterns of e-Learner Emotion Communication in Turn Level of Chinese Interactive Texts: Experiments and Findings	664
<i>Feng Tian, Qinghua Zheng, Deli Zheng</i>	
A Motivation Booster Proposal based on the Monitoring of users' Progress in CSCL environments.	671
<i>Leovy Echeverría, Ruth Cobos</i>	
Learning with Patterns: an Effective Way to Implement Computer Supported Pervasive Learning	677
<i>Nelson Baloian, José A. Pino, Gabriel Peña, Gustavo Zurita</i>	
Augmenting Teamwork Skills Through Web3D Technologies in Software Engineering Course	683
<i>LieHuo Chen, Qiang Liu, XiaoGuang Sun</i>	
Designing Training Content through Group Storytelling	689
<i>Ricardo Tulio Gandelman, Flávia Maria Santoro</i>	

Promoting learning through Social Networks Supported by a Matching System Model	695
<i>Soraia P.A. Silva, Claudia L.R. Motta, Carlo E.T. Oliveira</i>	
Other Applications	
An Architecture-Aware Routing Optimization via Satisfiability for Hierarchical FPGA	701
<i>Limin Zhu, Qiang Zhou, Yici Cai, Jinian Bian</i>	
Design Method and Finite Element Analysis on Refrigeration Scroll Compressor	707
<i>Licun Wang, Lijun Song</i>	
Design of Cooperative Deployment in Distributed HoneyNet System	711
<i>Haifeng Wang, Qingkui Chen</i>	
Game Theoretic Approach in Multipath Routing for Tradeoff between Routing Security and Performance	717
<i>Siguang Chen, Meng Wu</i>	
Functional Reverse Design: Method and Application	723
<i>Dunbing Tang, Renmiao Zhu, Ronghua Xu</i>	
Mechanism of Method Invocation and Return in Real-time Embedded Java Processor	728
<i>Guang Hu, Zhilei Chai, Xindong Ye, Shiliang Tu</i>	
Digital Identity Enrolment and Assurance Support for VeryIDX	734
<i>Jianming Yong, Elisa Bertino</i>	
PaperFlow/R: a Cooperative Environment for the Conception and Production of Scientific Publications	740
<i>Hugo Paredes, Benjamim Fonseca</i>	
Research on Library Management System for CDs Attached to Books Based on Cloud Computing	744
<i>Honghai Kan, Zhimin Yang, Yue Wang, Nana Qi</i>	
A Generative Concept Design Model Based On Parallel Evolutionary Strategy	748
<i>Wenke Zang, Guangchen Wang</i>	
Organizing Public Security During International Sports Events with LaSca	753
<i>Gustavo Carvalho, Sergio Palma J. Medeiros, Erick Alves Rezende, Jano Moreira de Souza</i>	

The Design of Collaboration Support between Command and Operation Teams during Emergency Response 759

Rodrigo Pinheiro Padilha, José Orlando Gomes, Marcos R S Borges, Jose H. Canós

A Preliminary Study on Collaborative Methods in Animation Design 764

Xiaopin Liu, Lin Li, Jinting Lu, Lin Du, Guangting Shen

Social Interaction Regulation in Virtual Web Environments using the Social Theatres Model 772

Hugo Paredes, F. Mário Martins

Structural Optimization of Honeycomb Paperboard Mould by Sensitivity Analysis 778

Suchang Ma, Xuebin Liu, Wei Zhao

Outage Probability Bound Analysis in Vehicle-Assisted Inter-Vehicular Communications 783

Zhaoxun Li, Yang Zhao, He Chen, Hanying Hu

Author Index

I