Proceedings of the 2012 IEEE 16th International Conference on Computer Supported Cooperative Work in Design

(CSCWD 2012)

Wuhan, China 23 – 25 May 2012



IEEE Catalog Number: ISBN:

CFP12797-PRT 978-1-4673-1211-0

Table of Contents

Keynote Papers

Distributed Intelligent Systems: A Paradigm Shift	1
William A. Gruver	
Recent Developments in Computer Supported Cooperative Work in Design: From group collaboration through global connectivity to informing apobetics	2
Imre Horvath	
Collaborations towards Adaptive Manufacturing	14
Lihui Wang	
Agents and Multi-Agent Systems	
An Architecture of BDI Agent for Autonomous Locomotives Controller	22
Marcos R. da Silva, Andr P. Borges, Osmar B. Dordal, Denise M. V. Sato, Br ¢ulio C. ¢vi, Fabr acio Enembreck, EdsonE. Scalabrin	
A Feature-based and Multi-Agents-based Collaborative Manufacturing Framework for Aircraft Structural Parts	30
Wangwei Chu, Yingguang Li, Changqing Liu, Limin Tang	
An Approach to Agent-Coalition-based Automatic Web Service Composition	37
Ye Zhong, Wenfeng Li, Xun Wang and Jia Fan	
Design on the Models of Airborne Force Cooperative Command System Based-on MAS	43
Wenan Tan and Song Li	
Task Assignment Approach in a Multi-agent System	47
Hong Liu and Yuling Sun	
An MAS-based And Fault-Tolerant Distributed ETL Workflow Engine	54
Jinluan Huang and Chaozhen Guo	
An Agent-based Dynamic Scheduling Approach for Flexible Manufacturing Systems	59
Li Nie, Yuewei Bai, Xiaogang Wang, Kai Liu and Chilan Cai	
A Distributed Multi-Agent Simulation Platform	64
Yijun Deng, Jian Cao and Xiaogang Wang	

Personal Assistant Agents and Multi-agent Middleware for CSCW				
Alistair Jones, Claude Moulin, Jean-Paul Barth ^{····} s, Dominique Lenne, Atman Kendira and Thierry Gidel				
Multi-Agent Based Cloud Utilization for IT OA Assets Dispatching Process in SCM's View: An Empirical Study	80			
Peichi Chao and Hung-Min Sun				
A Reputation Model based on Hierarchical Bayesian Estimation for Web Services	88			
Dongming Jiang, Jinyun Xue and Wuping Xie				
Collaboration Methods and Techniques				
Achieving Integrated Consistency Maintenance and Awareness in Real-Time Collaborative Programming Environments: The CoEclipse Approach	94			
Hongfei Fan and Chengzheng Sun				
A Selective Undoredo Method in 3D Collaborative Modeling Environment	102			
Yuan Cheng, Fazhi He, Xiantao Cai and Dejun Zhang				
Parameterized Design of Beating-up Mechanism in Rapier Loom Based on Pro/Engineer Program Development	109			
Xuemei Tang, Shijing Wu, Shunqi Mei and Jie Chen				
A Routing Collaboration Accountability Mechanism in Trustworthy and Controllable Network	113			
Jian Jiang, Junzhou Luo, Wei Li and Jing Tan				
Investigating the value of retention actions as a source of relevance information in the software development environment	121			
Rahat Iqbal, Adam Grzywaczewski, Faiyaz Doctor and Anne James				
Formalizing the Situation of a Business Process Activity	128			
Talita da Cunha Mattos, Fl¨¢via Maria Santoro, Kate Revoredo and Vanessa Tavares Nunes				
Scenario-Based Collaboration: An Approach to Refinement of Plans through Public Engagement	135			
Samuel de Oliveira Apolonio, Adriana S. Vivacqua and Marcos R. S. Borges				
A Novel Controller Design Approach Based On Object-Oriented Virtual Prototyping	143			
Yi Xiong and Guangyou Yang				
A Nonnested Collaborative Optimization Method for Multidisciplinary Design Problems	148			
Beibei Wu, Hai Huang and Wenrui Wu				

Multi-Dimensional Assessment on Free-Text Answers to Enhance Learners; Activities and Collaborations	153
Loc Phuoc Hoang, Ngamnij Arch-Int, Somjit Arch-Int and Wararat Rungworawut	
Mediating process adaptation through a goal-oriented context-aware approach	160
Vanessa Tavares Nunes, Cl"¢udia M. Lima Werner and Fl"¢via Maria Santoro	
Activity-Centered Design for Temporal Data Management	168
Shengqiong Yuan and Luo Zhong	
Intelligent Recommendation Methodology and System for Patent Search	172
Amy J. C. Trappey, Charles V. Trappey, Chun-Yi Wu, Chin Yuan Fan and Yi-Liang Lin	
<u>Using Collective Intelligence for Opinion Analysis and Tendency Determination</u>	179
Ming-Yi Lu, Hung-Lung Lin and Jiang-Liang Hou	
An Approach for Software Design Method Comparison	187
Hung-Fu Chang and Stephen C-Y. Lu	
Combinatorial Test Cases with Constraints in Software Systems	195
Longshu Li, Yingxia Cui and Yun Yang	
Support for Systems Development in Mobile Devices used in Emergency Management	200
Fernanda C.S.Araujo and Marcos R. S. Borges	
Design of the Executable Business State-Model Process based on Finite State Machine	207
Xiaoqiang Zheng, Min Liu and Junwei Yan	
A Hybrid Approach to Personalized Web Search	214
Xiyuan Wu, Yan Fu, Shixin Tian, Qinghua Zheng and Feng Tian	
Sharing Working Experience: Using a Model of Collaborative Traces	221
Qiang Li, Marie-H ⁻¹ l ne Abel and Jean-Paul Barth s	
eMail Mining: Knowledge Intensive Process Discovery through e-mails	228
Diego Carvalho Soares, Fl¨¢via Maria Santoro and Fernanda Araujo Baiao	
An efficient sequential watermark detection model for tracing network attack flows	236
Xiaogang Wang, Junzhou Luo and Ming Yang	
A Smart Card-Based Secure Software Distribution Scheme for Mobile Application Market	244
Ya-Jun Fan and Qiao-Yan Wen	
An Analysis of Anonymity for Cooperative Pseudonym Change Scheme in One-Dimensional VANETs	251

Yuanyuan Pan and Jianqing Li	
<u>Understanding Presence Awareness Information Needs Among Engineering Students</u>	258
Valeria Herskovic, Andr [□] s Neyem, Sergio F. Ochoa, Jos [□] A. Pino and Pedro Antunes	
Applied Membrane computation in Creative Design	265
Jie Xue and Xiyu Liu	
Research on the cooperative decision of business application needs in IT governance	268
Shuang Yang, Shaohua Zhang and Lei Kong	
Modeling of Cooperative Human-Machine-Human Systems based on Game Theory	274
Dirk Soeffker, Marcel Langer, Andreas Hasselberg and Gregor Flesch	
A Product Modular Design Method Based on Axiomatic Design	282
Qiang Cheng, Chuanming Xiao£¬Ligang Cai and Guojun Zhang	
The Variable Fidelity Optimization for simulation-based design: a review	289
Jun Zheng, Haobo Qiu and Hongyi Feng	
A Multiple Points-Wise Sliding DFT Method Based on Sliding Window Model and DIT Modification	295
Siwei Tan, Zhiliang Ren and Changcun Sun	
A local minimum sampling strategy for the construction of boundaries using support vector machines	299
Ke Lin, Haobo Qiu, Zhihui Yao and Tao Wu	
Application of BP Neural Network to Sale Forecast for H Company	304
Zheng Li and Renwang Li	
Modeling the Evolving Design Rationale to Achieve a Shared Understanding	308
Jihong Liu, Xujie Hu and Hao Jiang	
ISDM Adoption Using Delphi and AHP	315
Yacine Rezgui, Ian Wilson, Hamid Al Hajri, Adam Marks	
Cloud Manufacturing: Needs, Concept and Architecture	321
Mingwei Wang, Jingtao Zhou and Shikai Jing	
Collaboration Platforms, Software Tools, and Services	
Collaborative Support Embedded in Information System through Automatic Code Generation	328
Roque E.A Pinel, Rodrigo Salvador, Geraldo Zimbrao and Jano M. de Souza	

<u>Automatic Web Page Segmentation and Information Extraction Using Conditional Random Fields</u>	
Yunfei Gong and Qiang Liu	
A Recommender System for Metrics	
Luiz F. C. Tomaz, Jose A. Rodrigues Nt., Jano Souza and Geraldo Xexeo	
Software Platform to build geo-collaborative Systems supporting design and planning	
Jonathan Frez, Nelson Baloian and Gustavo Zurita	
A Mobile Collaborative Application to Reduce the Radio Traffic in Urban Emergencies	
Manuel Ibarra, "¢lvaro Monares, Sergio F.Ochoa, Jos" A.Pino and David Su"¢rez	
A Role-based Feature Model Componentization Framework and related Algorithms	
Jun Zhang and Shufen Liu	
MODUS-SD: User Modeling in Collaborative Software Development	
Gregory Moro Puppi Wanderley, Milton P.Ramos TECPAR - Paran¨¢, Cesar A.Tacla, Gilson Y.Sato, Edenilson Jos¨ da Silva and Emerson Cabrera Paraiso	
Improving the Initial Response Process in Urban Emergencies	
Alvaro Monares, Sergio F. Ochoa, Jos A. Pino and Valeria Herskovic	
An Approach to Requirements Categorizati using Kano's Model and Crowds	
Paula Nascimento, Rodrigo Aguas, Daniel Schneider and Jano De Souza	
Performance Analysis of Collaborative Design Network	
Jean-Paul Barthès	
A Cooperative Construction Approach for SaaS Applications	
Qian Li, Shijun Liu and Ying Pan	
Configurable Resource-Oriented Architecture towards Services Cooperation	
Hongming Cai, Lihong Jiang and Fenglin Bu	
An Effective Monetization Model with Pricing and Charging Strategy on Cloud Simulation Platform	
Lai Yu and Heming Zhang	
Building a High Realistic Media Space by Superimposing a Remote Person; s Figure on the Local View	
Mamoun Nawahdah and Tomoo Inoue	

Collaborative Workflows

Design and Implementation of a Collaborative-based AHP Evaluation System	423
Xianghui Wang, Yuejun Li and Wei Cui	
Integration, Optimization and Usability of Enterprise Applications	431
Rahat Iqbal, Nazaraf Shah, Faiyaz Doctor, Anne James and Tomasz Cichowicz	
A Visualization on Relationships of Cooperative Work Logs from Semantic Dimensional Feature Space	438
Guanting Shen and Xiaoping Liu	
Research on PDM-based Collaborative Development Platform between Academy and Subordinate Institutes	444
Liu Li, Kang Cao and Dingyong Tang	
A Policy-driven Exception Handling Approach for service-oriented Processes	449
Quanyu WANG, Guobin LV, Shi YING and Jing WEN	
PWMDS: A System Supporting Provenance-Based Matching and Discovery of Workflows in Proteomics Data Analysis	456
Guangmeng Zhai, Tun Lu, Xing Huang, Zhaocan Chen, Xianghua Ding and Ning Gu	
Ontology and Interoperability	
Consistency Maintenance Based on the Matching of Topological Entity	464
Xiaoxia Li, Fazhi He, Xiantao Cai and Dejun Zhang	
Knowledge Discovery of Customer Satisfaction and Dissatisfaction Using Ontology-based Text Analysis of Critical Incident Dialogues	470
Charles Trappey, Hsin-Ying Wu and Kuan-Liang Liu	
TravelHub: A Semantics-based Mobile Recommender for Composite Services	476
Hongjun Zhang, Yunying Gao, Hao Chen and Yinsheng Li	
An Ontology Enabled Runtime Infrastructure	483
Hongbo Sun, Wenhui Fan and Yueting Chai.	
Features Induction for Product Named Entity Recognition with CRFs	491
Fang Luo	
Towards Characterizing Knowledge Intensive Processes	497
Juliana B.S. Franca, Fernanda A. Baiao, Flavia M. Santoro	

Research on Semantic-based Knowledge Service for Cluster Supply Chain	505
Feng Wang, Meng Wang, Shuai Yang and Lanfen Lin	
Semantic access control for cloud computing based on e-Healthcare	512
Lili Sun, Hua Wang Jianming Yong and Guoxin Wu	
Research on Enterprise Interoperability for Cluster Supply Chain	519
Zhan Jiang, Lanfen Lin, Guorong Wang and Shuai Yang	
Research on Service Planning of Distributed Heterogeneous Design Resources	527
Neng Wan, Rong Mo and Zhi-Yong Chang	
A multi-views modeling approach for product lifecycle management in supply chain	533
Lihong Jiang, Boyi Xu and Hongming Cai	
Ontology-based Modeling of Manufacturing Information and its Semantic Retrieval	540
Shaoshuai Li and Lihong Qiao	
Vtcpuqto cvkqp'O qf gricpf 'Ko r rgo gpvcvkqp'htqo 'GDQO 'vq'O DQO 'hqt'O TQ'U{ uvgo '''''''	768
The Desire of the Desire of the West	
Jian-Bo Lai, Min Liu, Ming-Rui Wang and Jun-Wei Yan	
Jian-Bo Lai, Min Liu, Ming-Rui Wang and Jun-Wei Yan	
Cloud and Service-Oriented Computing	
	552
Cloud and Service-Oriented Computing	552
Cloud and Service-Oriented Computing Cloud Computing for Higher Education: A Roadmap	552 558
Cloud and Service-Oriented Computing Cloud Computing for Higher Education: A Roadmap MD. Anwar Hossain Masud, Dr. Xiaodi Huang and Jianming Yong	
Cloud and Service-Oriented Computing Cloud Computing for Higher Education: A Roadmap MD. Anwar Hossain Masud, Dr. Xiaodi Huang and Jianming Yong Research on Cloud Logistics-based One-stop Service Platform for Logistics Center	
Cloud and Service-Oriented Computing Cloud Computing for Higher Education: A Roadmap MD. Anwar Hossain Masud, Dr. Xiaodi Huang and Jianming Yong Research on Cloud Logistics-based One-stop Service Platform for Logistics Center Xun Wang, Wenfeng Li, Ye Zhong and Wei Zhao	558
Cloud Computing for Higher Education: A Roadmap MD. Anwar Hossain Masud, Dr. Xiaodi Huang and Jianming Yong Research on Cloud Logistics-based One-stop Service Platform for Logistics Center Xun Wang, Wenfeng Li, Ye Zhong and Wei Zhao A Service-cluster Based approach to service substitution of web service composition	558
Cloud Computing for Higher Education: A Roadmap MD. Anwar Hossain Masud, Dr. Xiaodi Huang and Jianming Yong Research on Cloud Logistics-based One-stop Service Platform for Logistics Center Xun Wang, Wenfeng Li, Ye Zhong and Wei Zhao A Service-cluster Based approach to service substitution of web service composition Lei Wu, Yong Zhang and Zeyu Di	558 564
Cloud Computing for Higher Education: A Roadmap MD. Anwar Hossain Masud, Dr. Xiaodi Huang and Jianming Yong Research on Cloud Logistics-based One-stop Service Platform for Logistics Center Xun Wang, Wenfeng Li, Ye Zhong and Wei Zhao A Service-cluster Based approach to service substitution of web service composition Lei Wu, Yong Zhang and Zeyu Di A Survey on Bio-inspired Algorithms for Web Service Composition	558 564
Cloud Computing for Higher Education: A Roadmap MD. Anwar Hossain Masud, Dr. Xiaodi Huang and Jianming Yong Research on Cloud Logistics-based One-stop Service Platform for Logistics Center Xun Wang, Wenfeng Li, Ye Zhong and Wei Zhao A Service-cluster Based approach to service substitution of web service composition Lei Wu, Yong Zhang and Zeyu Di A Survey on Bio-inspired Algorithms for Web Service Composition Lijuan Wang, Jun Shen and Jianming Yong An Energy Efficient Clustering-based Scheduling Algorithm for Parallel Tasks on	558 564 569
Cloud Computing for Higher Education: A Roadmap MD. Anwar Hossain Masud, Dr. Xiaodi Huang and Jianming Yong Research on Cloud Logistics-based One-stop Service Platform for Logistics Center Xun Wang, Wenfeng Li, Ye Zhong and Wei Zhao A Service-cluster Based approach to service substitution of web service composition Lei Wu, Yong Zhang and Zeyu Di A Survey on Bio-inspired Algorithms for Web Service Composition Lijuan Wang, Jun Shen and Jianming Yong An Energy Efficient Clustering-based Scheduling Algorithm for Parallel Tasks on Homogeneous DVS-enabled Clusters	558 564 569

Collaborative Virtual Environments

Research on the Walkthrough Engine for Virtual Environment	591
Lin Shi, Zhigang Li	
Study on Manufacturing Technology of Multi Heterogeneous Materials by Means of Virtual Manufacturing	596
Wang Feng and Xiaozhen Mi	
Evaluation of collisions between polygonal models in virtual assembly	601
Jiancheng Shi, Jianhua Liu, Ruxin Ning and Weiwei Hou	
Collaborative Wireless Sensor Networks	
A Quantum-inspired Ant-Based Routing algorithm for WSNs	609
Hao Jiang, Mingrui Wang, Min Liu and Juanwei Yan	
A Heterogeneous Sensors Integration Platform for Independent Living Spaces	616
Cheng Zheng, Weiming Shen, Henry Xue and Qi Hao	
An Improved Clustering Algorithm Based on Intersecting Circle Structure	622
Ze-Jun Yang, Ying-long Wang, Fu-Meng Zhao, Tai-Bo Huang	
Security and Privacy Considerations for Wireless Sensor Networks in Smart Home Environments	626
Kamrul Islam, Weiming Shen and Xianbin Wang	
Social Aspects and Human Factors Related to Collaboration	
CSCWD: Five Characters in Search of Crowds	634
Daniel Schneider, Katia Moraes, Jano Moreira De Souza and Maria Gilda P. Esteves.	
Analyzing Social Networks with D-Miner Cloud	642
Li Ho Leung, Vincent T.Y. Ng and Chen Chen	
Strategic Planning in Semantic Crowdware Large Groups Decision	649
Sergio Palma J. Medeiros, Daniel Schneider, Jano Moreira De Souza and Maria Gilda P. Esteves	
Humanistic Approach to the Representation of Business Processes	655
David Simoes£¬Pedro Antunes and Jos⁻¦ A. Pino	

The Similar Scholar Recommendation in Scholat	666
Atiao Yang, Jiangguo Li, Yong Tang, Jiangbin Wang and Yuan Zhao	
A Social Collaboration Platform for Enterprise Social Networking	671
Minbo Li, Guangyu Chen, Zhe Zhang and Yi Fu	
Forward or Ignore: User Behavior Analysis and Prediction on Microblogging	678
Guanghua Song, Zhitang Li and Hao Tu	
A Conceptual Model to Design Partially Virtual Communities	685
Francisco Gutierrez, Nelson Baloian, Sergio F. Ochoa and Gustavo Zurita	
Actively building Collaborative Filtering Recommendation in Clustered Social Data	693
Hongchen Wu, Xinjun Wang, Zhaohui Peng and Qiuyan Li	
Efficient Algorithm for Automated Rescue Boats	698
Mohammad Sohrab Hasan Nizami, S.M. Masudur Rahman Al-Arif ,A.H.M. Iftekharul Ferdous, Md. Moinuddin Sharif Riyadh and Fahd Rushd Faridi	
A Topic Detection Method Based on Semantic Dependency Distance and PLSA	703
Yan Chen, Yang Yang, Huisan Zhang, Haiping Zhu and Feng Tian	
Path Planning for Automated Robotic Rescue System	709
A.H.M. Iftekharul Ferdous, S.M. Masudur Rahman Al-Arif, Mohammad Sohrab Hasan Nizami, Md.Mohiuddin Abdul Quadir and Mohammad Woli Ullah	
The Structure Analysis of the CSCWD Conference; s Collaboration Network	713
Daoshu Li, Jianguo Li A Yong Tang, Jinjia Zheng and Jiemin Chen	
Collaboration Technology Applications in Manufacturing	
Dynamic scheduling model in FMS by considering energy consumption and schedule efficiency	719
Liping Zhang, Xinyu Li, Liang Gao, Guohui Zhang and Xiaoyu Wen	
<u>Hybrid Variable Neighborhood Search for Multi Objective Flexible Job Shop Scheduling Problem</u>	725
Guohui Zhang	
Modelling and Simulation on Collaborative Work in Cellular Manufacturing	730
Cancan Zhao, Xiaodong Zhang and Junjiang Qiu	
An Integrated and Improved Dispatching Approach to Reduce Cycle Time of Wet Etch and Furnace Operations in Semiconductor Fabrication	734
Chia-Yu Chang and Kuo-Hao Chang	

Cycle Time Reduction for Photolithography Area with Multi-Workstation	742
Li-Yuan Yen and Kuo-Hao Chang	
Satellite Multidiscipinary Collaborative Optimization with Distributed Computing	747
Wenrui Wu, Hai Huang and Beibei Wu	
Finite Element Analysis on the Micro-Forming Process of Zr-Based Bulk Metallic Glass	751
Qiang Yu, Jun Wang and Guanglan Liao	
Fuzzy Group Programming Decision-making for Manufacturing Cloud and Its Application on Air Separation Equipment	757
Weiqiang Jia, Yixiong Feng, Jianrong Tan and Xianghua An	
An improved harmony search algorithm for blocking job shop to minimize makespan	763
Peiying Hou, Dandan Wang and Xiaoping Li	
Modeling of Cutting Forces in a Face-Milling Operation With Gene Expression Programming	769
Yang Yang, Xinyu Li, Ping Jiang and Long Wen	
An ant colony algorithm for Master production scheduling optimization	775
Wu Zhengjia, Zhang Cheng and Zhu Xiaoqin	
Efficient Iterated Greedy Algorithm to Minimize Makespan for the No-wait Flowshop with Sequence Dependent Setup Times	780
Tao Xu, Xia Zhu and Xiaoping Li	
A memory and variable neighborhood structure based complete local search for the no-wait job shop problem	786
Minmin Li, Jie Zhu and Xiaoping Li	
Supporting Manufacturing Design by Analytics, Continuous Collaborative Process Improvement enabled by the Advanced Manufacturing Analytics Platform	793
Christoph Groeger, Florian Niedermann, Holger Schwarz and Bernhard Mitschang	
A Top-down Design Process Oriented Adaptive Conceptual Layout Design Environment Based on Semantic Norm Model	800
Wu Tao, Lin Ke, Qiang Peng, Jianjie Wu£¬Xiaobing Pei and Qiang Peng	
Modeling and Planning of Design Process Based on Improved Interpretative Structural Model in Collaborative Design	805
Guijiang Duan and Yang Wang	
An Ontology-based Architecture for Service-Orientated Design Knowledge Fusion in Group Corporation Cloud Manufacturing	811

T · 1	T .	1	ת	τ.
Jihong	Lıu	ana	BO	L1

A Collaborative Framework for Integrating Modelica Models and Computational Design Methods			
Yuming Zhu, Jihong Liu and Bo Li			
Research on Key Technologies for Design Services Collaboration in Cloud Manufacturing	824		
Jihong Liu and Hao Jiang			
Collaborative design of tolerance for assembly based on variation skeleton model	830		
Ke Jiang, Jianhua Liu, Ruxin Ning and Weidong Liu			
Applications to Architecture, Engineering, and Construction			
Service-Oriented Business Process Innovation in Construction Industry Based on Value Chain Analysis	837		
Xishuang Han, Jingxin Shi and Nan Jing			
Cloud and SNS Supported Collaboration in AEC Industry	842		
Yi Jiao, Yinghui Wang, Lei Yuan and Lin Li			
BIM + AR: Onsite Information Sharing and Communication via Advanced Visualization	850		
Xiangyu Wang and Peter ED Love			
The Parametric Modeling and Management System for Boiler Steel Frame	856		
Chen Jie, Wu Shi Jing, Yang Kangkan and Tang Xuemei			
Defining Context in a Business Process Collaborative Elicitation Approach	861		
Douglas Machado Silva, Renata Mendes de Araujo and Fl'¢via Maria Santoro			
Collaborative Networks of Green Products, Productions and Services			
A New Morphology-based Approach for Similarity Searching on Wafer Bin Maps in Semiconductor Manufacturing	869		
Tsung-Jung Hsieh, Yu-Syuan Huang, Chung-Shou Liao and Chen-Fu Chien			
Sustainable Information Management for Waste Electrical and Eletronic Equipment	875		
W.D. Li, K-M Chao, G.Q. Jin, K. Xia and L. Gao			
Study on Collaborative Design Methodologies of Product Service Systems	882		
Huibin Sun and Guohai Zhang			
A Grey Genetic Algorithm for Uncertainty Reverse Logistics	885		

Chen-Fang Tsai	
A Study on Extension Transformation for Conflict Resolution in Product Performance Design	893
Yanwei Zhao, Huanhuan Hong and Jian Chen	
Collaborative Design of Supply Chain Management Key Processes in the Semiconductor Industry	901
Ta-Ping Lu, Amy J.C. Trappey, Yi-Kuang Chen and Yu-Da Chang	
Internet of Things and Logistics	
Agent-oriented Smart Objects Development	907
Giancarlo Fortino, Antonio Guerrieri and Wilma Russo	
Multistage Collaborative Scheduling of Berth and Quay Crane based on Heuristic Strategies and Particle Swarm Optimization	913
Xiaolei Liang, Wenfeng Li, Wei Zhao and Bin Li	
A ZigBee-based miner Localization system	919
Huping Xu, Feng Li and Yancheng Ma	
Opportunistic IoT: Exploring the Social Side of the Internet of Things	925
Bin Guo, Zhiwen Yu, Xingshe Zhou and Daqing Zhang	
An optimization model for multi-period collaborative inventory control based on target performance management	930
De-Zhi Zhang, Xiao-Hong Liu and Shuang-Yan Li	
Research on the order-oriented logistic system based on the entire collaborative supply chain	935
Xinjian Shao	
Cloud Computing Based Logistics Resource Dynamic Integration and Collaboration	939
Jia Gao, Jun Ma, Xiu Zhang and Di Lu	

Author Index

944