

# **2014 47th Hawaii International Conference on System Sciences**

## **(HICSS 2014)**

**Waikoloa, Hawaii, USA  
6-9 January 2014**

**Pages 1-864**



**IEEE Catalog Number:** CFP14160-POD  
**ISBN:** 978-1-4799-2505-6

# **2014 47th Hawaii International Conference on System Science**

## **HICSS 2014**

### **Table of Contents**

Preface.....	li
Forty Seven Years of HICSS—A Brief History of the Hawaii International Conference on System Sciences.....	ii
Proceedings Overview.....	lxvi
Conference Administration.....	lxviii
HICSS-47 Tracks and Minitracks.....	lxix
Reviewers.....	lxxxvii

---

#### **Collaboration Systems and Technology Track—Co-Chairs: Robert Briggs and Jay Nunamaker**

Introduction to Collaboration Systems and Technology Track .....	1
<i>Jay F. Nunamaker and Bob Briggs</i>	

#### **Advances in Teaching and Learning Technologies—Co-Chairs: David Spencer, Tim Ellis, and Eric Santanen**

Introduction to Advances in Teaching and Learning Technologies Minitrack .....	2
<i>David H. Spencer, Eric L. Santanen, and Timothy J. Ellis</i>	

Acquiring IS Skill through Habitual Use .....	3
<i>David Eargle, Russ Taylor, Lane Sawyer, and James Gaskin</i>	

Anchoring for Self-Efficacy and Success .....	13
<i>Nimer Alrushiedat and Lorne Olfman</i>	

Attention Guidance in Online Learning Conversations .....	22
<i>Evren Eryilmaz, Brian Thoms, Justin Mary, Rosemary Kim, and Jakko Van der Pol</i>	

Crowd-Sourced Peer Feedback (CPF) for Learning Community Engagement: Results and Reflections from a Pilot Study .....	32
<i>Nigel P. Melville</i>	

Designing a Peer Support System for Computer Programming Courses Using Online Social Networking Software .....	42
<i>Brian Thoms, Evren Eryilmaz, and Steve Gerbino</i>	

Effective Teacher Training for Tablet Integration in K-12 Classrooms .....	52
<i>Pimpaka Prasertsilp and Lorne Olfman</i>	

Evaluating the Role of Face-to-Face Residencies in Cross-National, Accessible Cyberlearning .....	62
<i>Jennifer Ellis, Marilyn Arnone, Nanette Levinson, and Derrick L. Cogburn</i>	

Feature-Driven Adoption Patterns of Online Learning Environments—The Instructors' Perspective .....	72
<i>Margit Kastner, Bernd Simon, and Michael Schraml</i>	
Generation Alpha at the Intersection of Technology, Play and Motivation .....	82
<i>Holly Tootell, Mark Freeman, and Alison Freeman</i>	
Hand-Held Mobile Augmented Reality for Collaborative Problem Solving: A Case Study with Sorting .....	91
<i>Adrian Shatte, Jason Holdsworth, and Ickjai Lee</i>	
Networks of Change: Learning from Peers about Science Teaching .....	100
<i>Caroline Haythornthwaite, Wei Gao, and Fouad Abd-El-Khalick</i>	
Perceptions of Effectiveness of Instructional Uses of Technology in Higher Education in an Era of Web 2.0 .....	110
<i>Vivek Venkatesh, Anne-Marie Croteau, and Jihan Rabah</i>	
Sign Language Writing Acquisition—Technology for a Writing System .....	120
<i>Cayley Guimarães, Jeferson F. Guardesi, and Sueli Fernandes</i>	
Supporting Problem-Solving in Mathematics with a Conversational Agent Capable of Representing Gifted Students' Knowledge .....	130
<i>Eliane Vigneron Barreto Aguiar, Liane M. Rockenbach Tarouco, and Eliseo Reategui</i>	
<b>Communication and Information Systems Technology for Emergency Management—Co-Chairs: Jose J. Gonzalez, Murray Turoff, and Akemi Takeoka Chatfield</b>	
Introduction to Communication and Information Systems Technology for Emergency Management Minitrack .....	138
<i>Jose J. Gonzalez, Murray Turoff, and Akemi Takeoka Chatfield</i>	
Implementation Methodology of the Resilience Framework .....	139
<i>Leire Labaka, Tina Comes, Josune Hernantes, Jose Mari Sarriegi, and Jose J. Gonzalez</i>	
Increasing Efficiency of Humanitarian Organizations with Volunteer Driven Information Products .....	149
<i>Kenny Meesters and Bartel Van de Walle</i>	
<b>Cross-Organizational and Cross-Border IS/IT Collaboration—Co-Chairs: James Pick and Nicholas Romano</b>	
Introduction to Cross-Organizational and Cross-Border IS/IT Collaboration Minitrack .....	159
<i>James B. Pick and Nicholas Romano</i>	
Collaborative Technologies in an Inter-organizational Context: Examining the Role of Perceived Information Security and Trust on Post-adoption .....	160
<i>Simon T.N. Trang, Thierry J. Ruch, and Lutz M. Kolbe</i>	
Investigating Information Sharing Behavior in Supply Chains: Evidence from an Embedded Single Case Study .....	170
<i>Tobias Engel, Andreas Engelschalk, Nurettin Güner, Suparna Goswami, and Helmut Kremar</i>	
Which Boundary Objects Are Applicable to Service Innovation? A Dynamic Capability Perspective .....	180
<i>Andrea Malsbender, Ralf Plattfaut, Björn Niehaves, and Jörg Becker</i>	

**Creativity in Teams and Organizations—Co-Chairs: Triparna de Vreede, Roni Reiter-Palmon, and Ginamarie Ligon**

Introduction to Creativity and Innovation in Teams and Organizations Minitrack .....	190
<i>Triparna de Vreede, Roni Reiter-Palmon, and Ginamarie Ligon</i>	
Creativity at the Margins: Exploring Social and Technical Marginality in Novel Idea Generation .....	191
<i>Shannon M. Provost and Sirkka L. Jarvenpaa</i>	
Developing Entrepreneurial Skills in IT Courses: The Role of Agile Software Development	
Practices in Producing Successful Student Initiated Products .....	201
<i>Aaron Read, Douglas C. Derrick, and Gina S. Ligon</i>	
The Role of Shared Team Passion, Shared Norms of ICT Use, and Expertise on Knowledge	
Team Creativity .....	210
<i>Kyung Young Lee, Geneviève Bassellier, and Samer Faraj</i>	
When Process is Getting in the Way of Creativity and Innovation .....	221
<i>Sune Dueholm Müller, Frank Ulrich, and Peter Axel Nielsen</i>	

**Decision, Negotiation, Leadership, Social Communities, and Technology—Co-Chairs: Tung Bui and Mel Shakun**

Introduction to Decision, Negotiation, Leadership, Social Communities, and Technology	
Minitrack .....	230
<i>Tung Bui and Melvin F. Shakun</i>	
Accelerating Combinatorial Clock Auctions Using Bid Ranges .....	231
<i>Xiaoqiu Qiu and Dirk Neumann</i>	
Bilateral and Multi-bilateral Agent-Human Negotiations: Two Experiments .....	241
<i>Rustam Vahidov, Gregory Kersten, and Dmitry Guimon</i>	
Multi-strategy Selection Model for Automated Negotiation .....	250
<i>Mukun Cao and Xiaopei Dai</i>	
Perception Formation in Global Negotiations: The Role of Culture and Sacred Value .....	260
<i>Zhaleh Semnani-Azad, Alin Coman, Katia Sycara, and Michael Lewis</i>	
Validation and Analysis of a Distributed, Agent-Based Metaheuristic for Negotiation	
of Consensus Inspired by Honeybee Nest Site Selection Behavior .....	269
<i>Alexander S. Mentis and Levent Yilmaz</i>	

**Emerging Issues in Distributed Group Decision Making: Opportunities and Challenges—Co-Chairs: Anil Aggarwal, Doug Vogel, and Yuko Murayama**

Introduction to the Minitrack on Emerging Issues in Distributed Group Decision Making:	
Opportunities and Challenges .....	277
<i>Anil Aggarwal, Doug Vogel, and Yuko Murayama</i>	
Decision Making in Diverse Swift Teams: An Exploratory Study .....	278
<i>Anil Aggarwal</i>	

Empirical Investigation of the Cognitive Factors that Influence the Continued Use of Smartphones by College Students Who are Using Smartphones to Participate in the Future Global Distributed Teams .....	289
<i>Efosa C. Idemudia, Mahesh S. Raisinghani, and Alice Batch</i>	
Structural Changes Associated with the Temporal Dispersion of Teams: Evidence from Open Source Software Projects .....	300
<i>Jorge Colazo</i>	
The Influence of Knowledge Level in Information Security onto the Factors of Anshin for Online Shopping Users .....	310
<i>Dai Nishioka, Yoshia Saito, and Yuko Murayama</i>	
<b>Global Virtual Teams—Co-Chairs: Mike Hine, Frederick Zarndt, and Derrick L. Cogburn</b>	
Introduction to Global Virtual Teams Minitrack .....	320
<i>Mike Hine, Derrick L. Cogburn, and Frederick Zarndt</i>	
Global Team Boundary Complexity: A Social Network Perspective .....	321
<i>J. Alberto Espinosa, Gwanhoo Lee, and William DeLone</i>	
Handoffs Management in Follow-the-Sun Software Projects: A Case Study .....	331
<i>Josiane Kroll, Ita Richardson, Jorge L.N. Audy, and Jude Fernandez</i>	
Identifying Potential Leaders for Virtual Teams .....	340
<i>Josh Iorio and John Taylor</i>	
The Influence of Personal Traits on Innovative Processes in Virtual Teams .....	350
<i>Bettina C. Riedl, Tucker J. Marion, and Arnold Picot</i>	
<b>Human-Computer Interaction: Informing Design Utilizing Behavioral, Neurophysiological, and Design Science Methods—Co-Chairs: Christoph Schneider, Joe Valacich, and Angelika Dimoka</b>	
Introduction to Human-Computer Interaction: Informing Design Utilizing Behavioral, Neurophysiological, and Design Science Methods Minitrack .....	360
<i>Christoph Schneider, Joseph S. Valacich, and Angelika Dimoka</i>	
A Design Science Approach to Collective Intelligence Systems .....	361
<i>Alexander Kornrumpf and Ulrike Baumöl</i>	
Can Fixation on Main Images Predict Visual Appeal of Homepages? .....	371
<i>Soussan Djamasbi, Marisa Siegel, and Tom Tullis</i>	
Dissecting the Process of Knowledge Filtering in Electronic Networks of Practice .....	376
<i>Kelly J. Fadel, Thomas O. Meservy, and Matthew L. Jensen</i>	
Management Support Systems on Different Devices—A Business Perspective Accommodating Managers' Growing Range of Use Situations .....	386
<i>Jörg H. Mayer, Robert Winter, Daniel Stock, and Nadja Scholl-Steinepreis</i>	
(Re-)Evaluating User Interface Aspects in ERP Systems—An Empirical User Study .....	396
<i>Christian Lambeck, Romy Müller, Corinna Fohrholz, and Christian Leyh</i>	
The Applicability of Neurally-Controlled Devices in Business: A Student Perspective .....	406
<i>Adriane B. Randolph</i>	

Towards Fully Declarative High-Level Interaction Models: An Approach Facilitating Automated GUI Generation .....	412
<i>Filip Kis, Cristian Bogdan, Hermann Kaindl, and Jürgen Falb</i>	
Transitions: A Crossmedia Interaction Relevant Aspect .....	422
<i>João Paulo Delgado Preti, Flávio Miyamaru, and Lucia Vilela Leite Filgueiras</i>	
When Form and Function Combine: Hedonizing Business Information Systems for Enhanced Ease of Use .....	432
<i>Adarsh Kumar Kakar</i>	
You Said What? Assessing the Impact of Collaboration Technologies and Message Characteristics Using Physiological Measures .....	442
<i>Taylor M. Wells and Alan R. Dennis</i>	
<b>Processes and Technologies for Small and Large Team Collaboration—Co-Chairs: Gert-Jan de Vreede, Imed Boughzal, and Douglas Derrick</b>	
Introduction to Processes and Technologies for Small and Large Team Collaboration Minitrack .....	452
<i>Gert-Jan de Vreede, Imed Boughzala, and Douglas C. Derrick</i>	
Easy Collaboration Process Support System Design for Student Collaborative Group Work: A Case Study .....	453
<i>Xusen Cheng, Yuanyuan Li, Jianshan Sun, and Xiaodong Zhu</i>	
Mining Hidden Profiles in the Collaborative Evaluation of Raw Ideas .....	463
<i>Graham Horton and Jana Goers</i>	
Opening the Black Box of Team Processes and Emergent States: A Literature Review and Agenda for Research on Team Facilitation .....	473
<i>Isabella Seeber, Ronald Maier, and Barbara Weber</i>	
Towards a Maturity Model for the Assessment of Ideation in Crowdsourcing Projects .....	483
<i>Imed Boughzala, Triparna de Vreede, Cuong Nguyen, and Gert-Jan de Vreede</i>	
<b>Social and Psychological Perspectives in Collaboration Research—Co-Chairs: Roni Reiter-Palmon, Gert-Jan de Vreede, and Triparna de Vreede</b>	
Introduction to Social and Psychological Perspectives in Collaboration Research Minitrack .....	491
<i>Triparna de Vreede, Gert-Jan de Vreede, and Roni Reiter-Palmon</i>	
An Empirical Field Study of the Yield Shift Theory of Satisfaction .....	492
<i>Robert O. Briggs, Bruce A. Reinig, and G.J. de Vreede</i>	
Task Characteristics, Team Processes and Individual Use of Collaboration Technology: Test of a Cross-Level Mediation Model .....	500
<i>Likoebe M. Maruping and Massimo Magni</i>	
The Antecedents of Commitment towards Collaborative Work Practice Outcomes .....	510
<i>David Kocsis, Abdulrahman Alothaim, Triparna de Vreede, Lotfollah Najjar, and Gert-Jan de Vreede</i>	
The Impact of Posting URLs in Disaster-Related Tweets on Rumor Spreading Behavior .....	520
<i>Yuko Tanaka, Yasuaki Sakamoto, and Hidehito Honda</i>	

The Leadership Dimension of Coping with Technostress .....	530
<i>Christian Fieseler, Stephanie Grubenmann, Miriam Meckel, and Severina Müller</i>	
You Reap What You Sow? How Knowledge Exchange Effectiveness is Affected by Different Types of Communication in Enterprise Social Media .....	540
<i>Marten Risius and Roman Beck</i>	
<b>Social Media and E-Business Transformation—Co-Chairs: Christy Cheung, Matthew K.O. Lee, and Christian Wagner</b>	
Introduction to Social Media and E-Business Transformation Minitrack .....	550
<i>Christy M.K. Cheung, Matthew K.O. Lee, and Christian Wagner</i>	
Do I Switch? Understanding Users' Intention to Switch between Social Network Sites .....	551
<i>Liu Fei and Xiao Bo</i>	
Impact of Online Firm Generated Content (FGC) on Supply Chain Performance: An Empirical Analysis .....	561
<i>Ajaya Swain and Qing Cao</i>	
Leadership 2.0: Engaging and Supporting Leaders in the Transition towards a Networked Organization .....	574
<i>Alexander Richter and David Wagner</i>	
Social Media at SocioSystems Inc.: A Socio-technical Systems Analysis of Strategic Action .....	584
<i>Don Heath, Rahul Singh, and Jai Ganesh</i>	
The Wisdom of Crowds: Impact of Collective Size and Expertise Transfer on Collective Performance .....	594
<i>Christian Wagner and Ayoung Suh</i>	
Understanding Information Adoption in Online Review Communities: The Role of Herd Factors .....	604
<i>Xiao-Liang Shen, Kem Z.K. Zhang, and Sesia J. Zhao</i>	
Understanding Members' Attachment to Social Networking Sites: An Empirical Investigation of Three Theories .....	614
<i>Eric T.K. Lim, Dianne Cyr, and Chee-Wee Tan</i>	
<b>Technology-Mediated Collaborations in Healthcare—Co-Chairs: Souren Paul, Arkalgud Ramaprasad, and Nilmini Wickramasinghe</b>	
Introduction to Technology-Mediated Collaborations in Healthcare Minitrack .....	624
<i>Souren Paul, Arkalgud Ramaprasad, and Nilmini Wickramasinghe</i>	
Co-creation of Knowledge in Healthcare: A Study of Social Media Usage .....	626
<i>Fatou Bagayogo, Liette Lapointe, Jui Ramaprasad, and Isabelle Vedel</i>	
Communicating Personal Health Information in Virtual Health Communities: A Theoretical Framework .....	636
<i>Nima Kordzadeh and John Warren</i>	
Improving Knowledge Provision for Shared Decision Making in Patient-Physician Relationships—A Multiagent Organizational Approach .....	646
<i>Tobias Widmer, Marc Premm, Manfred Criegee-Rieck, and Nilmini Wickramasinghe</i>	

Meaningful Use of Electronic Health Records for Physician Collaboration: A Patient Centered Health Care Perspective .....	656
<i>Cherie Bakker Noteboom, Sergey P. Motorny, Sajda Qureshi, and Surendra Sarnikar</i>	
<b>Working and Gaming in 3D Virtual Environments—Co-Chairs: Gert-Jan de Vreede, Moez Limayem, and Imed Boughzala</b>	
Introduction to Working and Gaming in 3D Virtual Environments Minitrack .....	667
<i>Gert-Jan de Vreede, Imed Boughzala, and Moez Limayem</i>	
Explaining the Development of the Excessive Use of Massively Multiplayer Online Games: A Positive-Negative Reinforcement Perspective .....	668
<i>Zach W.Y. Lee, Christy M.K. Cheung, and Tommy K.H. Chan</i>	
Repositories of Community Memory as Visualized Activities in 3D Virtual Worlds .....	678
<i>Mikhail Fominykh, Ekaterina Prasolova-Førland, Leif M. Hokstad, and Mikhail Morozov</i>	
You: What Generation Y Thinks about Corporate Social Networking Applications? .....	688
<i>Imed Boughzala</i>	
<b>Decision Analytics, Mobile Services, and Service Science Track—Co-Chairs: Christer Carlsson and Haluk Demirkan</b>	
Introduction to Decision Analytics, Mobile Services, and Service Science Track (DA/MS/SS) .....	697
<i>Christer Carlsson and Haluk Demirkan</i>	
<b>Analytics and Design-Led Innovations and Management—Chair: Haluk Demirkan</b>	
Introduction to Analytics and Design-Led Innovations and Management Minitrack .....	698
<i>Haluk Demirkan</i>	
A Pricing Model for Cloud Computing Service .....	699
<i>Tayfun Keskin and Nazim Taskin</i>	
Internet Interconnection Techno-economics: A Proposal for Assured Quality Services and Business Models .....	708
<i>Antonio Ghezzi, Manos Dramitinos, Eleni Agiatzidou, Finn Tore Johanses, Håkon Løsethagen, Andrea Rangone, and Raffaello Balocco</i>	
Representing Service Business Models with the Service Business Model Canvas—The Case of a Mobile Payment Service in the Retail Industry .....	718
<i>Andreas Zolnowski, Christian Weiß, and Tilo Böhmann</i>	
<b>Big Data: Challenges, Opportunities, and Realities—Co-Chairs: Steve Kaisler, Frank Armour, and Albert Espinosa</b>	
Introduction to Big Data: Challenges, Opportunities, and Realities Minitrack .....	728
<i>Stephen Kaisler, Frank Armour, and J. Albert Espinosa</i>	
Advanced Analytics—Issues and Challenges in a Global Environment .....	729
<i>Stephen H. Kaisler, J. Albert Espinosa, Frank Armour, and William H. Money</i>	
Industrial Open Data: Case Studies of Early Open Data Entrepreneurs .....	739
<i>Juho Lindman, Tomi Kinnari, and Matti Rossi</i>	

Opportunities for Business Intelligence and Big Data Analytics in Evidence Based Medicine .....	749
<i>Omar El-Gayar and Prem Timsina</i>	

Towards Model-Driven Engineering for Big Data Analytics—An Exploratory Analysis of Domain-Specific Languages for Machine Learning .....	758
<i>Dominic Breuker</i>	

### **Data, Text, and Web Mining for Managerial Decision Support—Co-Chairs: Dursun Delen and Asil Oztekin**

Introduction to Data, Text, and Web Mining for Managerial Decision Support Minitrack .....	768
<i>Dursun Delen and Asil Oztekin</i>	

An Ontology-Based Information Extraction (OBIE) Framework for Analyzing Initial Public Offering (IPO) Prospectus .....	769
<i>Jie Tao, Amit V. Deokar, and Omar F. El-Gayar</i>	

Analyzing the Predictability of Exchange Traded Funds Characteristics in the Mutual Fund Market on the Flow of Shares Using a Data Mining Approach .....	779
<i>Asil Oztekin, Kyle Best, and Dursun Delen</i>	

Data Mining to Improve Safety of Blood Donation Process .....	789
<i>Madhav Erraguntla, Peter Tomasulo, Kevin Land, Hany Kamel, Marjorie Bravo, Barbee Whitaker, Richard Mayer, and Sarita Khaire</i>	

Star Ratings versus Sentiment Analysis—A Comparison of Explicit and Implicit Measures of Opinions .....	796
<i>Parisa Lak and Ozgur Turetken</i>	

Trading on Twitter: The Financial Information Content of Emotion in Social Media .....	806
<i>Hongkee Sul, Alan R. Dennis, and Lingyao (Ivy) Yuan</i>	

### **Decision Making in Production Processes—Co-Chairs: Norbert Gronau and Helen Zong**

Introduction to Decision Making in Production Processes Minitrack .....	816
<i>Norbert Gronau and Helen Zong</i>	

A Web-Based Smart Inference System to Support Automated Generation of LCA Simulation Models .....	817
<i>Sarfraz Ul Haque Minhas and Ulrich Berger</i>	

An Evolutionary Approach on Multi-objective Scheduling for Evolving Manufacturing Systems .....	826
<i>Benjamin Klöpper, Jan-Patrick Pater, and Wilhelm Dangelmaier</i>	

Decision-Making Process in Manufacturing Technology Planning for Small Scale Productions .....	836
<i>Fritz Klocke, Kristian Arntz, and Dominik Heeschen</i>	

### **Decision Support for Sustainability—Co-Chairs: Omar El-Gayar, PingSun Leung, and Arno Scharl**

Introduction to Decision Support for Sustainability Minitrack .....	846
<i>Omar El-Gayar, Pingsun Leung, and Arno Scharl</i>	

A Model and Simulation Framework for Exploring Potential Impacts of Land Use Policies: The Brazilian Cerrado Case .....	847
<i>Carolina G. Abreu, Cassio G.C. Coelho, Célia G. Ralha, and Bruno Macchiavello</i>	

Early Assessment of an Approach to Determining the Predictive Coverage of Case-Based Reasoning with Adaptation through CARMA .....	857
<i>John D. Hastings, Alexandre V. Latchininsky, Tyler J. Adelung, and Scott P. Schell</i>	
Offshore Wind Energy in Emerging Countries: A Decision Support System for the Assessment of Projects .....	865
<i>André Koukal and Michael H. Breitner</i>	
Product Carbon Footprint and Life Cycle Assessment of ICT—Literature Review and State of the Art .....	875
<i>Daniel Grimm, Daniel Weiss, Koray Erek, and Ruediger Zarnekow</i>	
Towards Green Business Process Management: Concept and Implementation of an Artifact to Reduce the Energy Consumption of Business Processes .....	885
<i>Markus Reiter, Peter Fettke, and Peter Loos</i>	
Towards Proactive and Flexible Agent-Based Generation of Policy Packages for Active Transportation .....	895
<i>Araz Taeihagh and René Bañares-Alcántara</i>	
<b>Information Filtering and Retrieval: Soft Computing-Based Approaches—Co-Chairs: Gabriella Pasi and Witold Pedrycz</b>	
Introduction to Information Filtering and Retrieval: Soft Computing-Based Approaches Minitrack .....	905
<i>Gabriella Pasi and Witold Pedrycz</i>	
A Combined Method for Mitigating Sparsity Problem in Tag Recommendation .....	906
<i>Endang Djuana, Yue Xu, Yuefeng Li, and Audun Jøsang</i>	
Investigating Features in Support of Web Tools for Information Gathering .....	916
<i>Anwar Alhenshiri, Carolyn Watters, Michael Shepherd, and Jack Duffy</i>	
Modeling Technology Assessment via Knowledge Maps .....	924
<i>Elan Sasson, Gilad Ravid, and Nava Pliskin</i>	
Soft Retrieval and Uncertain Databases .....	934
<i>Ronald R. Yager and Rachel L. Yager</i>	
<b>Innovation, Design, and Development of ICT-Enabled Services—Co-Chairs: Tuure Tuunanen, Tilo Böhmann, and David Tilson</b>	
Introduction to Innovation, Design, and Development of ICT-Enabled Services Minitrack .....	944
<i>Tilo Böhmann, David Tilson, and Tuure Tuunanen</i>	
Context-Based Energy Saving Strategies for Continuous Determination of Position on iOS Devices .....	945
<i>Wolfgang Narzt</i>	
Domain Specific Case Tool for ICT-Enabled Service Design .....	955
<i>Tuure Tuunane and Michael Przybilski</i>	
Towards a Better Understanding of the Dynamics of Platform as a Service Business Models .....	965
<i>Andrea Giessmann, Philipp Kyas, Pasi Tyrväinen, and Katarina Stanoevska</i>	

Value Creation and Evolution of a Value Network: A Longitudinal Case Study on a Platform-as-a-Service Provider .....	975
<i>Arto Ojala and Nina Helander</i>	
<b>Intelligent Decision Support for Logistics and Supply Chain Management—Co-Chairs: Hans-Jurgen Sebastian and Stefan Voss</b>	
Introduction to Intelligent Decision Support for Logistics and Supply Chain Management Minitrack .....	985
<i>Hans-Jürgen Sebastian and Stefan Voß</i>	
Decision Support for Capacitated Arc Routing for Providing Municipal Waste and Recycling Services .....	986
<i>Aman Preet Singh, Guenther Ruhe, Seyed Abbas Hosseini Amereei, and Scott Banack</i>	
Dynamic Hub Location Problems with Single Allocation and Multiple Capacity Levels .....	994
<i>Astrid M.C. Hörhammer</i>	
Intelligent Decision Support for Aircraft Logistics at Commercial Airports .....	1004
<i>L. Douglas Smith</i>	
<b>Mobile Value Services—Co-Chairs: Harry Bouwman and Pirkko Walden</b>	
Introduction to Mobile Value Services Minitrack .....	1014
<i>Harry Bouwman and Pirkko Walden</i>	
A Context-Sensitive Tool to Support Mobile Technology Acceptance Research .....	1015
<i>Elisabeth Pergler, Richard Hable, Ernesto Rico-Schmidt, Christian Kittl, and Rainer Schamberger</i>	
An Exploratory Smartphone Measurement: Perception vs. Actual Use .....	1023
<i>Shahrokh Nikou</i>	
An Exploratory Study of the Motives Engaged in the Dissemination of Social Word-of-Mouth via Mobile Device .....	1033
<i>Pin Luarn, Yu-Ping Chiu, and Jen-Chieh Yang</i>	
An Institutional Perspective of Mobile Payment Adoption: The Case of Japan .....	1043
<i>Remy Magnier-Watanabe</i>	
MOSDEN: An Internet of Things Middleware for Resource Constrained Mobile Devices .....	1053
<i>Charith Perera, Prem Prakash Jayaraman, Arkady Zaslavsky, Peter Christen, and Dimitrios Georgakopoulos</i>	
Privacy as a Tradeoff: Introducing the Notion of Privacy Calculus for Context-Aware Mobile Applications .....	1063
<i>Zhan Liu, Jialu Shan, Riccardo Bonazzi, and Yves Pigneur</i>	
The Relationship between Open Innovation and Strategy: Data-Driven Analysis of the Mobile Value Services Industry .....	1073
<i>Antonio Ghezzi, Raffaello Balocco, and Andrea Rangone</i>	

**Multi-criteria Decision Support—Co-Chairs: H. Roland Weistroffer and Jyrki Wallenius**

Introduction to Multi-criteria Decision Support Minitrack .....	1083
<i>H. Roland Weistroffer and Jyrki Wallenius</i>	
A Multiple Criteria Decision Analysis (MCDA) Software Selection Framework .....	1084
<i>Yan Li and Manoj A. Thomas</i>	
Customer Order-Driven BOCR-Based Supplier Selection .....	1095
<i>Chang Joo Yun, Chung-Hsing Yeh, and Susan Bedingfield</i>	
Dissemination and Impact of Multi-criteria Decision Support Methods for IT Project Evaluation .....	1103
<i>E.W.N. Bernroeder, Nikolaus Obwegeser, and Volker Stix</i>	
GCAR: A Group Composite Alternatives Recommender Based on Multi-criteria Optimization and Voting .....	1113
<i>Hanan Mengash and Alexander Brodsky</i>	

Market Potential Analysis and Branch Network Planning: Application in a German Retail Bank .....	1122
<i>Stephan Schneider, Florian Seifert, and Ali Sunyaev</i>	
Supplier Selection by Multi-attribute Combinatorial Bidding .....	1132
<i>Joice Cavalheiro Ribeiro Giacon, Hugo T. Yoshida Yoshizaki, and Gilberto Montibeller</i>	

**Network DSS: Decision Support in Mobile Social and Sensor Networks—Co-Chairs: Alex Bordetsky, Dan Dolk, and Stefan Pickl**

Introduction to Network DSS: Decision Support in the Collaborative Environment of Mobile Social and Sensor Networks Minitrack .....	1142
<i>Alex Bordetsky, Dan Dolk, and Stefan Pickl</i>	
Employing Smartphones as a Low-Cost Multi Sensor Platform in a Field Operational Test with Electric Vehicles .....	1143
<i>Matthias Pfriem and Frank Gauterin</i>	
Slime Mold Inspired Evolving Networks under Uncertainty (SLIMO) .....	1153
<i>Erik Kropat and Silja Meyer-Nieberg</i>	
Tracking Targets under Uncertainty: Natural Computing Approaches .....	1162
<i>Silja Meyer-Nieberg and Erik Kropat</i>	

**New Economic Models of the Digital Economy—Co-Chairs: Roger Maull and Cathy Mulligan**

Introduction to New Economic Models of the Digital Economy Minitrack .....	1172
<i>Roger Maull and C.E.A. Mulligan</i>	
Investigating Location-Based Services from a Business Model Perspective .....	1173
<i>Stephanie Ryschka, Josefina Tonn, Kyung-Hun Ha, and Markus Bick</i>	
Modularity and Network Integration: Emergent Business Models in Banking .....	1183
<i>J.M. Liebenau, S.M. Elaluf-Calderwood, and C.M. Bonina</i>	
The Impact of Datafication on Service Systems .....	1193
<i>Roger Maull, Phil Godsiff, and C.E.A. Mulligan</i>	

When Common Knowledge Becomes Common Doubt—Modeling IT-Induced Ambiguities about the Strategic Situation as Reasons for Flash Crashes .....	1202
<i>Tobias Brandt and Dirk Neumann</i>	
<b>Service Analytics—Co-Chairs: Hansjörg Fromm and Thomas Setzer</b>	
Introduction to Service Analytics Minitrack .....	1212
<i>Hansjörg Fromm and Thomas Setzer</i>	
Cultural Differences in Playing Repeated Ultimatum Game Online with Virtual Humans .....	1213
<i>Elnaz Nouri and David Traaum</i>	
On the Robustness of ARIMA-Based Benchmarks for Corporate Financial Planning Quality .....	1221
<i>Jochen Martin and Thomas Setzer</i>	
User Heterogeneity in Trading Systems: Assessing Trader's Market Predisposition via Personality Questionnaires .....	1230
<i>Tobias T. Kranz, Florian Teschner, and Christof Weinhardt</i>	
<b>Service Science, Management, and Engineering (SSME)—Co-Chairs: Fu-ren Lin, Paul Maglio, and Mike Shaw</b>	
Introduction to Service Science, Management, and Engineering (SSME) Minitrack .....	1240
<i>Fu-Ren Lin, Paul P. Maglio, and Michael J. Shaw</i>	
A Situated and Embodied Approach to Service Design .....	1241
<i>Anshuman Saxena and Alain Wegmann</i>	
Challenges for Cloud-Based Simulation Games .....	1251
<i>Bastian Kurbjuhn, Frederik Kramer, and Klaus Turowski</i>	
Measuring Service Productivity: The Case of a German Mobile Service Provider .....	1258
<i>Hans Peter Rauer</i>	
Outsourcing of Disaggregated Services in Cloud-Based Enterprise Information Systems .....	1268
<i>Aleksandre Asatiani, Uday Apte, Esko Penttilä, Mikko Rönkkö, and Timo Saarinen</i>	
Reconciling Resource Integration and Value Propositions—The Dynamics of Value Co-creation .....	1278
<i>Jaakko Siltaloppi and Stephen L. Vargo</i>	
Service Identification—An Explorative Evaluation of Recent Methods .....	1285
<i>Frederik Kramer, Carsten Görling, and Stefan Wind</i>	
Service Value Network Formation for Organic Agricultural Produce: An Actor Network Theory Perspective .....	1296
<i>Fu-Ren Lin and Szu-Yun Wang</i>	
The Service Recovery Paradox in a Call-Center Context: Compensation and Timeliness in Recovering Mobile Customers .....	1306
<i>Raquel Reis Soares, João F. Proença, and P.K. Kannan</i>	
Optimal Recommendation and Long-Tail Provision Strategies for Content Monetization .....	1316
<i>Ting-Kai Hwang and Yung-Ming Li</i>	
Towards a “BI Value Coin”: Applying Service Research to Address Business Intelligence Challenges .....	1324
<i>Pamela R. Clavier, Hugo H. Lotriet, and Johan J. van Loggerenberg</i>	

<b>Soft Computing and Intelligent Data Analysis—Chair: Rudolf Kruse</b>	
Introduction to the Soft Computing and Intelligent Data Analysis Minitrack .....	1334
<i>Rudolf Kruse</i>	
A Neural Network-Based Ensemble Prediction Using PMRS and ECM .....	1335
<i>Dongkuan Xu, Yi Zhang, Cheng Cheng, Wei Xu, and Likuan Zhang</i>	
Identification of Linear Switching System with Unknown Dimensions .....	1344
<i>Amir H. Shirdel, Kaj-Mikael Björk, and Hannu T. Toivonen</i>	
<b>Visualization and Analytics for Decision Support, Operational Management, and Scientific Discovery—Co-Chairs: David S. Ebert, Thomas Ertl, and Kelly Gaither</b>	
Introduction to Visualization and Analytics for Decision Support, Operational Management, and Scientific Discovery Minitrack .....	1353
<i>David S. Ebert, Thomas Ertl, and Kelly Gaither</i>	
Retaining Interactivity in a Visual Analytics System for Massive Public Transportation Data Sets .....	1354
<i>Michael Wörner and Thomas Ertl</i>	
Studying Animation for Real-Time Visual Analytics: A Design Study of Social Media Analytics in Emergency Management .....	1364
<i>Nadya A. Calderon, Richard Arias-Hernandez, and Brian Fisher</i>	
Towards a Visual Analytics Framework for Handling Complex Business Processes .....	1374
<i>William Ribarsky, Derek Xiaoyu Wang, Wenwen Dou, and William J. Tolone</i>	
<b>Digital and Social Media Track—Co-Chairs: Kevin Crowston and Karine Nahon</b>	
Introduction to Digital and Social Media Track .....	1384
<i>Kevin Crowston and Karine Nahon</i>	
<b>Crowdsourcing Content Production and Online Knowledge Repositories—Co-Chairs: Pnina Fichman, Noriko Hara, and Howard Rosenbaum</b>	
Introduction to Crowdsourcing Content Production and Online Knowledge Repositories Minitrack .....	1385
<i>Pnina Fichman, Noriko Hara, and Howard Rosenbaum</i>	
Questioning the Question—Addressing the Answerability of Questions in Community Question-Answering .....	1386
<i>Chirag Shah, Vanessa Kitzie, and Erik Choi</i>	
Value-Adding Intermediaries in Software Crowdsourcing .....	1396
<i>Hamed Tajedin and Dorte Nevo</i>	
User Involvement in Self-Governing Content in Professional Online Communities .....	1406
<i>Tingting Zhang, William Y.C. Wang, and Angsana A. Techatassanasoontorn</i>	

**Data Analytics and Data Mining for Social Media—Co-Chairs: David Yates, Jennifer Xu, and Dominique Haughton**

Introduction to Data Analytics and Data Mining for Social Media Minitrack .....	1414
<i>Dominique M. Haughton, Jennifer J. Xu, and David J. Yates</i>	
A Framework for Recommender Systems in Online Social Network Recruiting: An Interdisciplinary Call to Arms .....	1415
<i>Ricardo Buettner</i>	
“A Bit of Code”: How the Stack Overflow Community Creates Quality Postings .....	1425
<i>Megan Squire and Christian Funkhouser</i>	
Cues to Deception in Social Media Communications .....	1435
<i>Erica J. Briscoe, D. Scott Appling, and Heather Hayes</i>	
Effect of Social Networks on Online Reviews .....	1444
<i>Parastoo Samiei and Arvind K. Tripathi</i>	
Mining Frequent Trajectory Patterns and Regions-of-Interest from Flickr Photos .....	1454
<i>Guochen Cai, Chihiro Hio, Luke Bermingham, Kyungmi Lee, and Ickjai Lee</i>	
Using Large Scale Aggregated Knowledge for Social Media Location Discovery .....	1464
<i>Dennis Thom, Harald Bosch, Robert Krueger, and Thomas Ertl</i>	
Visual Network Analysis of Twitter Data for Co-organizing Conferences: Case CMAD 2013 .....	1474
<i>Jari Jussila, Jukka Huhtamäki, Kaisa Henttonen, Hannu Kärkkäinen, and Kaisa Still</i>	

**Materiality of Information, Documents, and Work—Co-Chairs: Carsten Østerlund, David Ribes, and Daniela K. Rosner**

Introduction to Materiality of Information, Documents, and Work Minitrack .....	1484
<i>Carsten Østerlund, David Ribes, and Daniela K. Rosner</i>	
Business Processes as Sociomaterial Networks: Exploring the Multiple Dimensions of Flexibility in Process Modeling .....	1485
<i>Joao Porto de Albuquerque and Marcel Christ</i>	
Institutional Ethnography (IE), Texts and the Materiality of the Social .....	1495
<i>Marie L. Campbell</i>	
Material Engagements: Putting Plans and Things Together in Collaborative Ocean Science .....	1505
<i>Stephanie B. Steinhardt and Steven J. Jackson</i>	
Seeing with Paper: Government Documents and Material Participation .....	1515
<i>Megan Finn, Janaki Srinivasan, and Rajesh Veeraraghavan</i>	
Technology-Related Interruptions and Paper-Based Documents in Back-Office Knowledge Work .....	1525
<i>Sari Yli-Kauhaluoma and Mika Pantzar</i>	
The Materiality of Contract in Relation to ICT: Lessons from a Biography of Contract Management Software .....	1535
<i>Carolyn Paris</i>	

## **Network Analysis of Social and Digital Media—Co-Chairs: George A. Barnett and Devan Rosen**

Introduction to Network Analysis of Social and Digital Media Minitrack .....	1545
<i>Devan Rosen and George A. Barnett</i>	
Characterizing Communication Networks Associated with Political Hashtags .....	1546
<i>Misa Maruyama, Daniel D. Suthers, and Scott P. Robertson</i>	
Detection of Domestic Human Trafficking Indicators and Movement Trends Using Content	
Available on Open Internet Sources .....	1556
<i>Michelle Ibanez and Daniel D. Suthers</i>	
I'm Not Just Wasting Time Online! Test of Situational Awareness: An Exploratory Study .....	1566
<i>Rebecca L. Badawy, Michael A. Stefanone, and Robyn L. Brouer</i>	
Impact Factor 2.0: Applying Social Network Analysis to Scientific Impact Assessment .....	1576
<i>Christian Pieter Hoffmann, Christoph Lutz, and Miriam Meckel</i>	
Search in Social Networks: Designing Models and Algorithms That Maximize Human Influence .....	1586
<i>Ericsson Santana Marin and Cedric Luiz de Carvalho</i>	
Twitter Connections among Local Health Departments as Potential Pathways for Dissemination .....	1596
<i>Jenine K. Harris, Ross C. Brownson, Ryan A. Bell, Ryan C. Maier, Elisia Cohen, and Nancy Mueller</i>	

## **Social Media and Learning—Co-Chairs: Maarten de Laat, Caroline Haythornthwaite, Shane Dawson, and Dan Suthers**

Introduction to Social Media and Learning Minitrack .....	1606
<i>Maarten De Laat, Caroline Haythornthwaite, Shane Dawson, and Dan Suthers</i>	
Badges of Friendship: Social Influence and Badge Acquisition on Stack Overflow .....	1607
<i>Alexander Halavais, K. Hazel Kwon, Shannon Havener, and Jason Striker</i>	
Collaborative Learning in Facebook: Adverse Effects of Individual Preparation .....	1616
<i>Raluca Judele, Dimitra Tsovaltzi, Thomas Puhl, and Armin Weinberger</i>	
Hei Mookie! Where Do I Start? The Role of Artifacts in an Unmanned MOOC .....	1625
<i>Marisa Ponti</i>	
Novice Programmers Talking about Projects: What Automated Text Analysis Reveals	
about Online Scratch Users' Comments .....	1635
<i>Nicole Forsgren Velasquez, Deborah A. Fields, David Olsen, Taylor Martin, Mark C. Shepherd, Anna Strommer, and Yasmin B. Kafai</i>	
Social Network Enhancement for Non-formal Learning .....	1645
<i>Christopher Whitty and Rachid Anane</i>	

**Social Media and the Workplace: Job and Work Design Issues in a Social Enterprise—Co-Chairs: Xuefei (Nancy) Deng, K.D. Joshi, and Yibai Li**

Introduction to Social Media and Workplace: Job and Work Design Issues in a Social Enterprise Minitrack .....	1655
Xuefei (Nancy) Deng, K.D. Joshi, and Yibai Li	
Learning by Blogging: Understanding Salespeople's Learning Experiences on Social Media .....	1656
Minna Rollins, Jack Wei, and David Nickell	
Re-tweeting and the Theory of Middle-Status Conformity in the Post-adoption Use of Twitter .....	1666
Tom Mattson and Sal Aurigemma	
Unfriending on Facebook: Context Collapse and Unfriending Behaviors .....	1676
Christopher Sibona	
<b>Social Networking and Communities—Co-Chairs: Caroline Haythornthwaite, Karine Nahon, and Anatoliy Gruzd</b>	
Introduction to Social Networking and Communities Minitrack .....	1686
Caroline Haythornthwaite, Karine Nahon, and Anatoliy Gruzd	
Cheating, Social Network Games and the Role of Platforms .....	1687
Mia Consalvo and Irene Serrano Vazquez	
Collaboration via Cooperation and Competition: Small Community Clustering in an MMO .....	1695
Nathaniel D. Poor	
Facebook Fallout: The Emotional Response to Being Unfriended on Facebook .....	1705
Christopher Sibona	
Government and Social Media: A Case Study of 31 Informational World Cities .....	1715
Agnes Mainka, Sarah Hartmann, Wolfgang G. Stock, and Isabella Peters	
Investigating Effects of Monetary Reward on Information Disclosure by Online Social Networks Users .....	1725
Joshana Shibchurn and Xiang Bin Yan	
Is Web 2.0 Culture-Free or Culture-Bound? Differences between American and Korean Blogs .....	1735
Haiyan Jia, S. Shyam Sundar, Ji Young Lee, and Seoyeon Lee	
Link Sharing on Twitter during Popular Events: Implications for Social Navigation on Websites .....	1745
Naureen Nizam, Carolyn Watters, and Anatoliy Gruzd	
Social Media Gerontology: Understanding Social Media Usage among a Unique and Expanding Community of Users .....	1755
Clayton Hutto and Caroline Bell	
The Effect of Community Type on Knowledge Sharing Incentives in Online Communities: A Meta-analysis .....	1765
Mohamed Abouzahra and Joseph Tan	
The Impact of Perceived Privacy Breach on Sustainability of Social Networking Sites .....	1774
Stanislav Mamonov and Marios Koufaris	

The Role of Marketer- and User-Generated Content in Sustaining the Growth of a Social Media Brand Community .....	1785
<i>Yi Ding, Chee Wei Phang, Xianghua Lu, Chuan-Hoo Tan, and Juliana Sutanto</i>	
Understanding Social Commerce Intention: A Relational View .....	1793
<i>Jun Chen, Xiao-Liang Shen, and Zhen-Jiao Chen</i>	
<b>Text Analytics—Co-Chairs: Carolyn Watters and Evangelos Milios</b>	
Introduction to Text Analytics Minitrack .....	1803
<i>Evangelos Milios and Carolyn Watters</i>	
Automating Discovery of Dominance in Synchronous Computer-Mediated Communication .....	1804
<i>Jim Samuel, Richard Holowczak, Raquel Benbunan-Fich, and Ilan Levine</i>	
Large-Scale Web Page Classification .....	1813
<i>Sathi T. Marath, Michael Shepherd, Evangelos Milios, and Jack Duffy</i>	
Mapping the Territories of Privacy: Textual Analysis of Privacy Frames in American Mainstream News .....	1823
<i>Federica Fornaciari</i>	
Word Cloud Explorer: Text Analytics Based on Word Clouds .....	1833
<i>Florian Heimerl, Steffen Lohmann, Simon Lange, and Thomas Ertl</i>	
<b>The Humanized Web: Networks, Crowds, and Their Output—Co-Chairs: Jeffrey Nickerson, Donald Stein, and Harri Oinas-Kukkonen</b>	
Introduction to The Humanized Web: Networks, Crowds, and Their Output Minitrack .....	1843
<i>Jeffrey V. Nickerson, Don Stein, and Harri Oinas-Kukkonen</i>	
Examining the Role of “Place” in Twitter Networks through the Lens of Contentious Politics .....	1844
<i>Jeff J. Hemsley and Josef Eckert</i>	
The Influence of Negative Emotions in an Online Brand Community on Customer Innovation Activities .....	1854
<i>Hanjun Lee, Suyeon Jeong, and Yongmoo Suh</i>	
The Value of a Recommendation: The Role of Social Ties in Social Recommender Systems .....	1864
<i>Oliver Oechslein and Thomas Hess</i>	
User-Rank: Generic Query Optimization for Participatory Social Applications .....	1874
<i>Danny Hughes, Caren Crowley, Wilfried Daniels, Rafael Bachiller, and Wouter Joosen</i>	
Who Wants to “Share Weather”? The Impacts of Off-Line Interactions on Online Behavior .....	1884
<i>Katarina Elevant</i>	
<b>E-Government Track—Chair: Hans (Jochen) Scholl</b>	
Introduction to the Electronic Government Track .....	1894
<i>Hans Jochen Scholl</i>	

**Emerging Topics—Co-Chairs: Theresa Pardo, Tino Schuppan, and Samuel Fosso Wamba**

Introduction to Emerging Topics Minitrack .....	1895
<i>Theresa A. Pardo, Tino Schuppan, and Samuel Fosso Wamba</i>	
A Framework for Benchmarking Open Government Data Efforts .....	1896
<i>Djoko Sigit Sayogo, Theresa A. Pardo, and Meghan Cook</i>	
Finding Needle in the Case-Stack: Effective Remote Monitoring of Courts .....	1906
<i>Amn Rahman, Hassan Nawaz, Omer Naeem, Fareed Zaffar, Farooq Naseer, and Adeel Zaffar</i>	
The Orientation-Maturity Framework for Understanding the E-Government Key Issues in China .....	1916
<i>Zhang Nan, Yin Cong, Meng Qinguo, and Guo Xunhua</i>	

**E-Government Education—Co-Chairs: Elsa Estevez, Wojciech Cellary, and Jim Davies**

Introduction to E-Government Education Minitrack .....	1926
<i>Elsa Estevez, Wojciech Cellary, and Jim Davies</i>	
E-Government at Work Level: Skilling or De-skilling? .....	1927
<i>Tino Schuppan</i>	
The Project TEDS@wildau: TEDS Framework Integration into the Moodle Platform for User-Specific Quality Assurance of Learning Scenarios .....	1935
<i>Margit Scholl, Peter Ehrlich, Andreas Wiesner-Steiner, and Denis Edich</i>	

**ICT-Enabled Crisis, Disaster, and Catastrophe Management—Co-Chairs: Akemi Takeoka Chatfield, Jose J. Gonzalez, and Tina Comes**

Introduction to ICT-Enabled Crisis, Disaster and Catastrophe Management Minitrack .....	1946
<i>Akemi Takeoka Chatfield, Jose J. Gonzalez, and Tina Comes</i>	
#Sandy Tweets: Citizens' Co-Production of Time-Critical Information during an Unfolding Catastrophe .....	1947
<i>Akemi Takeoka Chatfield, Hans Jochen Scholl, and Uuf Brajawidagda</i>	
Feelings and Perspective Matter: Sharing of Crisis Information in Social Media .....	1958
<i>Rongjuan Chen and Yasuaki Sakamoto</i>	
Social Media and Emergency Management: Exploring State and Local Tweets .....	1968
<i>Lemuria Carter, Jason Bennett Thatcher, and Ryan Wright</i>	
Table-Top Exercises for Emergency Management: Tame Solutions for Wicked Problems .....	1978
<i>Svante Edzén</i>	

**Infrastructure Security—Co-Chairs: Wm. Arthur Conklin, Ray Vaughn, and Gregory White**

Introduction to Infrastructure Security Minitrack .....	1986
<i>Wm. Arthur Conklin, Gregory B. White, and Rayford B. Vaughn Jr.</i>	
Designing a Formal Model Facilitating Collaborative Information Sharing for Community Cyber Security .....	1987
<i>Wanying Zhao and Gregory White</i>	
Municipal E-Government Security: Insights from a Study of Orange County, California .....	1997
<i>Timothy J. Perez</i>	

Re-engineering Cybersecurity Education in the US: An Analysis of the Critical Factors .....	2006
<i>Wm. Arthur Conklin, Raymond E. Cline, and Tiffany Roosa</i>	

Security Analysis of Selected AMI Failure Scenarios Using Agent Based Game Theoretic Simulation .....	2015
<i>Robert K. Abercrombie, Bob G. Schlicher, and Frederick T. Sheldon</i>	

Unintentional Insider Threat: Contributing Factors, Observables, and Mitigation Strategies .....	2025
<i>Frank L. Greitzer, Jeremy Strozer, Sholom Cohen, John Bergey, Jennifer Cowley, Andrew Moore, and David Mundie</i>	

## **Open and Participatory Government—Co-Chairs: Scott Robertson, John C. Bertot, and Mitch Cochran**

Introduction to Open and Participatory Government Minitrack .....	2035
<i>Scott P. Robertson, John C. Bertot, and Mitchell Cochran</i>	

A Proposed Standard Procedure to Define Minimum Scanning Attribute Levels for Hard Copy Documents .....	2036
<i>Mitchell Cochran</i>	

Active Citizen E-Participation in Local Governance: Do Individual Social Capital and E-Participation Management Matter? .....	2044
<i>Jooho Lee and Soonhee Kim</i>	

Participatory Budgeting: A Framework to Analyze the Value-Add of Citizen Participation .....	2054
<i>Catherine G. Mkude, Cristina Pérez-Espés, and Maria A. Wimmer</i>	

Public Participation GIS: The Case of Redistricting .....	2063
<i>Micah Altman and Michael P. McDonald</i>	

The Challenges of Challenge.Gov: Adopting Private Sector Business Innovations in the Federal Government .....	2073
<i>Ines Mergel, Stuart I. Bretschneider, Claudia Louis, and Jason Smith</i>	

The Impact of the Transparency Policy on University Students' Trust and Intention of Continued Use .....	2083
<i>Ramón Rufín Moreno and Cayetano Medina Molina</i>	

## **Open Data and Cloud Services—Co-Chairs: Marijn Janssen, Yannis Charalabidis, and Helmut Krcmar**

Introduction to Open Data and Cloud Services Minitrack .....	2093
<i>Marijn Janssen, Yannis Charalabidis, and Helmut Krcmar</i>	

Applying Design Patterns in URI Strategies—Naming in Linked Geospatial Data Infrastructure .....	2094
<i>Sonya Abbas and Adegboyega Ojo</i>	

Dynamic Capabilities for Information Sharing: XBRL Enabling Business-to-Government Information Exchange .....	2104
<i>Marijn Janssen and Yao-Hua Tan</i>	

Evaluating Second Generation Open Government Data Infrastructures Using Value Models .....	2114
<i>Yannis Charalabidis, Euripides Loukis, and Charalampos Alexopoulos</i>	

From the Ground to the Cloud—A Structured Literature Analysis of the Cloud Service Landscape around the Public and Private Sector .....	2127
<i>Steffi Haag, Andreas Eckhardt, and Julia Krönung</i>	

Having the Mind in the Cloud: Organizational Mindfulness and the Successful Use of Desktop as a Service .....	2137
<i>Sabine Dernbecher</i>	
<b>Policies and Governance for the Network Society—Co-Chairs: Peter Parycek, Antonio Cordella, and Frank Bannister</b>	
Introduction to Policies and Governance for the Network Society Minitrack .....	2147
<i>Peter Parycek, Frank Bannister, and Antonio Cordella</i>	
Legitimate E-Government—Public E-Services as a Facilitator of Political Legitimacy .....	2148
<i>Elin Wihlborg</i>	
The Public Procurement of IS—A Process View .....	2158
<i>Carl Erik Moe and Mike Newman</i>	
The Role of ICTs in Adaptive and Persistent Authoritarianism: A Study of China at the Administrative Division Level .....	2168
<i>Qinfeng Zhu and Marko M. Skoric</i>	
<b>Services and Information—Co-Chairs: L. Christian Schaupp, Lemuria Carter, and Rodrigo Sandoval Almazan</b>	
Introduction to Services and Information Minitrack .....	2178
<i>Lemuria Carter, Ludwig C. Schaupp, and Rodrigo Sandoval Almazán</i>	
E-Government Web Portal Adoption: A Service Level and Service Quality Perspective .....	2179
<i>Xiao Jiang and Shaobo Ji</i>	
Explanation of Public Private Partnership (PPP) Outcomes in E-Government—A Social Capital Perspective .....	2189
<i>Ramesh Narasimhan and Madhuchhanda Das Aundhe</i>	
Motivations, Deployment, and Assessment of Taiwan’s E-Invoicing System: An Overview .....	2200
<i>Yuh-Jzer Joung, Yen-Chung Tseng, Shih-Chao Cha, Nai-Wei Lo, Gary Chung, and Chun-Kun Liu</i>	
The Role of Familiarity or Experience in Generating Trust and in Its Impact on Continued Use .....	2210
<i>Cayetano Medina Molina and Ramón Rufín Moreno</i>	
<b>Social Media and Social Networking and Government—Co-Chairs: Suha AlAwadhi, Jay Kesan, and Marko M. Skoric</b>	
Introduction to Social Media and Social Networking and Government Minitrack .....	2220
<i>Suha Alawadhi, Jay P. Kesan, and Marko M. Skoric</i>	
Application of Web 2.0 Technologies in E-Government: A United Kingdom Case Study .....	2221
<i>Uthayasankar Sivarajah, Zahir Irani, and Stephen Jones</i>	
Crowdsourcing Hazardous Weather Reports from Citizens via Twittersphere under the Short Warning Lead Times of EF5 Intensity Tornado Conditions .....	2231
<i>Akemi Takeoka Chatfield and Uuf Brajawidagda</i>	
My Name Is Khan: The Use of Twitter in the Campaign for 2013 Pakistan General Election .....	2242
<i>Saifuddin Ahmed and Marko M. Skoric</i>	

**Transformational Government—Co-Chairs: J. Ramon Gil-Garcia, Miriam Lips, and Leif Skiftenes Flak**

Introduction to the Transformational Government Minitrack .....	2252
<i>J. Ramon Gil-Garcia, Miriam B. Lips, and Leif Skiftenes Flak</i>	
Enacting Collaborative Electronic Government: Empirical Evidence and Lessons for Developing Countries .....	2253
<i>J. Ramon Gil-Garcia, César Renteria, and Luis F. Luna-Reyes</i>	
The Role of Social Actors in the Sustainability of E-Government Implementation and Use: Experience from Indonesian Regencies .....	2263
<i>Nurdin Nurdin, Rosemary Stockdale, and Helena Scheepers</i>	
Unveiling Barriers and Enablers of Risk Management in Interoperability Efforts .....	2273
<i>Pernille Monstad Røberg, Leif Skiftenes Flak, and Per Myrseth</i>	

**Electric Energy Systems Track—Co-Chairs: Thomas J. Overbye and Robert J. Thomas**

Introduction to Electric Energy Systems Track .....	2283
<i>Thomas J. Overbye and Robert J. Thomas</i>	

**Economics, Markets, and Policy—Chair: Tim Mount**

Introduction to Economics, Markets and Policy Minitrack .....	2284
<i>Tim Mount</i>	
Cost Allocation in Ancillary Service Markets .....	2285
<i>Tobias Haring and Göran Andersson</i>	
Electrical Energy Storage Systems: Technologies' State-of-the-Art, Techno-economic Benefits and Applications Analysis .....	2295
<i>P. Medina, A.W. Bazuayehu, J.P.S. Catalão, E.M.G. Rodrigues, and J. Contreras</i>	
Electricity Restructuring, Consumer Prices and the Cost of Capital: Lessons for the Modeling of Future Policy .....	2305
<i>Leonard S. Hyman and Richard E. Schuler</i>	
Barriers to Increasing the Role of Demand Resources in Electricity Markets .....	2314
<i>Alberto J. Lamadrid, Tim Mount, Wooyoung Jeon, and Hao Lu</i>	
Investigation of Non-zero Duality Gap Solutions to a Semidefinite Relaxation of the Optimal Power Flow Problem .....	2325
<i>Daniel K. Molzahn, Bernard C. Lesieutre, and Christopher L. DeMarco</i>	
Measurement of Energy Market Inefficiencies in the Coordination of Natural Gas & Power .....	2335
<i>Richard D. Tabors and Seabron Adamson</i>	
Robust Optimization Based Economic Dispatch for Managing System Ramp Requirement .....	2344
<i>Anupam A. Thatte, Xu Andy Sun, and Le Xie</i>	
Stochastic Optimal Power Flow with Uncertain Reserves from Demand Response .....	2353
<i>Maria Vrakopoulou, Johanna L. Mathieu, and Göran Andersson</i>	
The Effects of Residential Energy Efficiency on Electric Demand Response Programs .....	2363
<i>Ward Jewell</i>	

## **Integrating Distributed and Renewable Resources—Chair: Seth Blumsack**

Introduction to Integrating Distributed and Renewable Resources Minitrack .....	2373
<i>Seth Blumsack, David P. Chassin, and J. Charles Smith</i>	
Correcting Optimal Transmission Switching for AC Power Flows .....	2374
<i>Clayton Barrows, Seth Blumsack, and Paul Hines</i>	
Effects of PV on Conventional Generation .....	2380
<i>Rajatha Bhat, Miroslav Begovic, Insu Kim, and John Crittenden</i>	
Fast Regulation Service Provision via Aggregation of Thermostatically Controlled Loads .....	2388
<i>Borhan M. Sanandaji, He Hao, and Kameshwar Poolla</i>	
Self-Balancing Distributed Energy in Power Grids: An Architecture Based on Autonomic Computing .....	2398
<i>Jennifer Perez, Jessica Diaz, Carlos Vidal, Daniel Rodriguez, and Diego Fernández</i>	
Storage Sizing and Placement through Operational and Uncertainty-Aware Simulations .....	2408
<i>Krishnamurthy Dvijotham, Misha Chertkov, and Scott Backhaus</i>	
The Impact of Variable Market Price on Optimal Control of Wind-Hydro Storage System in Kenya .....	2417
<i>Maureen Murage, Judith B. Cardell, June Lukuyu, and C. Lindsay Anderson</i>	
Variable Generation, Reserves, Flexibility and Policy Interactions .....	2426
<i>James Ryan, Erik Ela, Damian Flynn, and Mark O’Malley</i>	

## **Monitoring, Control, and Protection—Chair: Joe Eto**

Introduction to the Monitoring, Control, and Protection Minitrack .....	2435
<i>Joe Eto</i>	
A Real-Time Scheme for Validation of an Auto-regressive Time Series Model for Power System Ambient Inter-area Mode Estimation .....	2436
<i>Gurudatha K. Pai and John W. Pierre</i>	
Automatic Generation Control and Its Implementation in Real Time .....	2444
<i>Dimitra Apostolopoulou, Peter W. Sauer, and Alejandro D. Domínguez-García</i>	
Congestion Measures for Organized Markets in the U.S. ....	2453
<i>Emily Fisher and Joseph H. Eto</i>	
Grid Modernization: Seamless Integration of Protection, Optimization and Control .....	2463
<i>A.P. Sakis Meliopoulos, George J. Cokkinides, Renke Huang, and Paul Myrda</i>	
Modal Energy Trending for Ringdown Analysis in Power Systems Using Synchrophasors .....	2475
<i>Zaid Tashman and Vaithianathan “Mani” Venkatasubramanian</i>	
Phasor Measurement Unit Placement for Identifying Power Line Outages in Wide-Area Transmission System Monitoring .....	2483
<i>Hao Zhu and Yiyu Shi</i>	
Reliable Implementation of Robust Adaptive Topology Control .....	2493
<i>M. Kezunovic, T. Popovic, G. Gurrala, P. Dehghanian, A. Esmaeilian, and M. Tasdighi</i>	

Security-Constrained MIP Formulation of Topology Control Using Loss-Adjusted Shift Factors .....	2503
<i>Evgeniy A. Goldis, Michael C. Caramanis, C. Russ Philbrick, Aleksandr M. Rudkevich, and Pablo A. Ruiz</i>	

### **Resilient Networks—Chair: Jeff Dagle**

Introduction to Resilient Networks Minitrack .....	2510
<i>Jeff Dagle</i>	
GPU-Accelerated Solutions to Optimal Power Flow Problems .....	2511
<i>Logan Rakai and William Rosehart</i>	
Statistical Properties and Classification of N-2 Contingencies in Large Scale Power Grids .....	2517
<i>P.A. Kaplunovich and K.S. Turitsyn</i>	
The Impact of Size and Inhomogeneity on Power Transmission Network Complex System Dynamics .....	2527
<i>B.A. Carreras, D.E. Newman, and I. Dobson</i>	
Thread Group Multithreading: Accelerating the Computation of an Agent-Based Power System Modeling and Simulation Tool—C GridLAB-D .....	2536
<i>Shuangshuang Jin and David P. Chassin</i>	

### **Information Technology in Healthcare Track—Co-Chairs: William G. Chismar and Tom Horan**

Introduction to the Information Technology in Healthcare Track .....	2546
<i>William G. Chismar and Thomas A. Horan</i>	

### **Data Analysis and Visualization in Biomedical Informatics—Co-Chairs: Hesham Ali and Kate Dempsey**

Introduction to Data Analysis and Visualization in Biomedical Informatics Minitrack .....	2547
<i>Hesham H. Ali and Kathryn M. Dempsey</i>	
SNP-SNP Interaction Using Gauss Chaotic Map Particle Swarm Optimization to Detect Susceptibility to Breast Cancer .....	2548
<i>Li-Yeh Chuang, Yu-Da Lin, Hsueh-Wei Chang, and Cheng-Hong Yang</i>	
Application of a Hybrid Text Mining Approach to the Study of Suicidal Behavior in a Large Population .....	2555
<i>Kenric W. Hammond and Ryan J. Laundry</i>	
Learning Predictive Models from Integrated Healthcare Data: Extending Pattern-Based and Generative Models to Capture Temporal and Cross-Attribute Dependencies .....	2562
<i>Rui Henriques and Cláudia Antunes</i>	

### **Global Health IT Strategies and Applications—Co-Chairs: Joseph Tan, Sarah L. Patrick, and Michael Dohan**

Introduction to Global Health IT Strategies and Applications Minitrack .....	2570
<i>Joseph Tan, Michael S. Dohan, and Sarah Patrick</i>	
Medical Document Classification Based on MeSH .....	2571
<i>Abdullah Muhammad Alghoson</i>	
Mobile Personal Health Records: Research Agenda for Applications in Global Health .....	2576
<i>Michael S. Dohan, Mohamed Abouzahra, and Joseph Tan</i>	

## **HCI and Consumer Health Informatics—Co-Chairs: Richard Burkhard, Ann Fruhling, and Soussan Djamasbi**

Introduction to HCI and Consumer Health Informatics Minitrack .....	2586
<i>Ann Fruhling, Rich Burkhard, and Soussan Djamasbi</i>	
Alignment of Concerns: A Design Rationale for Patient Participation in eHealth .....	2587
<i>Tariq Andersen, Jørgen Bansler, Finn Kensing, Jonas Moll, and Karen Dam Nielsen</i>	
Determinants of Vertical and Horizontal Online Health Information Behavior .....	2597
<i>Hye-Jin Paek and Thomas Hove</i>	
Magic Mirror for Neurorehabilitation of People with Upper Limb Dysfunction Using Kinect .....	2607
<i>Orlando Erazo, José A. Pino, Rosario Pino, Alfonso Asenjo, Carmen Fernández, and Alfonso Asenjo</i>	
Text Simplification Tools: Using Machine Learning to Discover Features that Identify Difficult Text .....	2616
<i>David Kauchak, Obay Mouradi, Christopher Pentoney, and Gondy Leroy</i>	
Towards a Cardiology/EHR Interaction Workflow Usability Evaluation Method .....	2626
<i>Lisa A. Grabenbauer, Ann L. Fruhling, and John R. Windle</i>	
Video Conference as a Tool to Enable Participation in Discharge Planning—Experiences from Implementers about the Implementation Process .....	2636
<i>Malin Hofflander, Lina Nilsson, Christel Borg, and Sara Eriksén</i>	

## **Incorporating an Evidence Base into mHealth Design and Analysis—Co-Chairs: Janet Brigham and Benjamin Schooley**

Introduction to Evidence-Based Health Design and Analysis Minitrack .....	2644
<i>Janet Brigham and Benjamin Schooley</i>	
A Tailoring Algorithm to Optimize Behavior Change .....	2645
<i>Janet Brigham, Harold S. Javitz, Ruth E. Krasnow, Lisa M. Jack, and Gary E. Swan</i>	
Building an Evidence Base Using Qualitative Data for mHealth Development .....	2655
<i>Beth Bock, Nancy Barnett, Rochelle Rosen, Kristen Walaska, Herpreet Thind, and Victoria Cobb</i>	
Enabling Patient Information Handoff from Pre-hospital Transport Providers to Hospital Emergency Departments: Design-Science Approach to Field Testing .....	2665
<i>Abdullah Murad, Benjamin Schooley, Thomas Horan, and Yousef Abed</i>	
Mobile Medical Applications for Melanoma Risk Assessment: False Assurance or Valuable Tool? .....	2675
<i>Xavier Chadwick, Lois J. Loescher, Monika Janda, and H. Peter Soyer</i>	

## **IT Adoption, Diffusion, and Evaluation in Healthcare—Co-Chairs: Ton Spil, Cynthia LeRouge, Carla Wiggins, and Leigh Cellucci**

Introduction to IT Adoption, Diffusion, and Evaluation in Healthcare Minitrack .....	2685
<i>Leigh Cellucci, Cynthia LeRouge, Ton Spil, and Carla Wiggins</i>	
A Framework to Improve Coordinated Action toward the Adoption and Implementation of Health Information Exchanges .....	2686
<i>John C. Pendergrass and C. Ranganathan</i>	

A Review of Health Information Technology Implementation Success Factors: Importance of Regulation and Finance .....	2693
<i>Thi Thanh Hai Nguyen, Kaija Saranto, Tommi Tapanainen, and Diana Ishmatova</i>	
Adoption of Assistive Technologies for Aged Care: A Realist Review of Recent Studies .....	2706
<i>Suchada Vichitvanichphong, Amir Talaei-Khoei, Donald Kerr, and Amir Hossein Ghapanchi</i>	
Adoption of Electronic Health Record System: Multiple Theoretical Perspectives .....	2716
<i>Qiwei Gan and Qing Cao</i>	
Effects of Online Advertising Strategy on Attitude towards Healthcare Service .....	2725
<i>Hui-Chih Wang and Her-Sen Doong</i>	
EMR Adoption among Office Based Physicians and Practices: Impact of Peer-to-Peer Interactions, Peer Support and Online Forums .....	2733
<i>Priya Nambisan</i>	
Environment versus Partnering Experience: An Exploration of Chinese Healthcare IT Manager Attitudes toward Innovation of Services .....	2741
<i>Dominic Thomas, Yurong Yao, and Xitong Guo</i>	
Examining the Social Influence on Information Technology Sustained Use in a Community Health System: A Hierarchical Bayesian Learning Method Analysis .....	2751
<i>Haijing Hao, Rema Padman, Baohong Sun, and Rahul Telang</i>	
Exploring User Acceptance of a Text-Message Based Health Intervention .....	2759
<i>Maya Corneille, Lemuria Carter, Naomi M. Hall-Byers, Trenette Clark, and Sinead Younge</i>	
Factors Explaining Physicians' Acceptance of Electronic Health Records .....	2768
<i>Katharina Steininger, Barbara Stiglbauer, Bernd Baumgartner, and Bernhard Engleeder</i>	
Finding Value While Planning a Statewide Health Information Exchange .....	2778
<i>Dana Edberg, Lynn O'Mara, and Jeanne Wendel</i>	
General Causality Orientations and the Adoption of Integrated Personal Health Records Systems: A Latent Class Analysis with Distal Outcomes .....	2788
<i>Vahid Assadi and Khaled Hassanein</i>	
Governance of Open Source Electronic Health Record Projects: A Successful Case of a Hybrid Model .....	2798
<i>Placide Poba-Nzaou, Josianne Marsan, Guy Paré, and Louis Raymond</i>	
Investigating the Influence of Psychological Ownership and Resistance on Usage Intention among Physicians .....	2808
<i>Tim Smith, Gerald Grant, and Alejandro Ramirez</i>	
Personal Health Records Success: Why Google Health Failed and What Does that Mean for Microsoft HealthVault? .....	2818
<i>Ton Spil and Richard Klein</i>	
Recognizing Patient Safety Importance through Instrument Validation on Physicians' Assessment of an EHR .....	2828
<i>Cherie Noteboom, Kathryn Dempsey, and Ann Fruhling</i>	
Telepathology Implementation Challenges and Benefits: A Scoping Review .....	2838
<i>Julien Meyer and Guy Paré</i>	

The Use of Health Information Technology in Ambulatory Surgery Centers .....	2848
<i>Carla Wiggins and Teri S. Peterson</i>	
Understanding Stakeholder Behavior in Nationwide Electronic Health Infrastructure	
Implementation .....	2857
<i>Philipp Klöcker</i>	
<b>IT Architectures and Applications in Healthcare Environments—Co-Chairs: Radmila Juric, Jasna Kuljis, and Patricia Oberndorf</b>	
Introduction to IT Architectures and Applications in Healthcare Environments Minitrack .....	2867
<i>Radmila Juric, Jasna Kuljis, and Patricia Oberndorf</i>	
A Business Process Management Approach to Perioperative Supplies/Instrument Inventory and Workflow .....	2868
<i>Jim Ryan, Carmen Lewis, Barbara Doster, and Sandra Daily</i>	
A Guiding Framework for Ontology Reuse in the Biomedical Domain .....	2878
<i>Tejal Shah, Fethi Rabhi, Pradeep Ray, and Kerry Taylor</i>	
A Neuro-fuzzy Approach to Bad Debt Recovery in Healthcare .....	2888
<i>Donghui Shi, Jozef Zurada, and Jian Guan</i>	
A Pervasive Mobile Assistance System for Health and Fitness Scenarios .....	2898
<i>Andreas Emrich, Alexandra Theobalt, Frederik Leonhardt, Sönke Knoch, Dirk Werth, and Peter Loos</i>	
A Smartphone-Based System for Population-Scale Anonymized Public Health Data Collection and Intervention .....	2908
<i>Andrew Clarke and Robert Steele</i>	
Analyzing and Modeling of Medical Data on Distributed Computing Infrastructures .....	2918
<i>Gabor Terstyanszky, Tamas Kiss, Vladimir Korkhov, and Silvia D. Olabarriaga</i>	
ASeCS: Assistive Self-Care Software Architectures for Delivering Service in Care Homes .....	2928
<i>Reza Shojanoori, Radmila Juric, Mahi Lohi, and Gabor Terstyanszky</i>	
Automating the Integration of Clinical Studies into Medical Ontologies .....	2938
<i>Mark Roantree, Jim O'Donoghue, Noel O'Kelly, Martin van Boxtel, and Sebastian Köhler</i>	
Bridging Electronic Health Record Access to the Cloud .....	2948
<i>Brian Coats and Subrata Acharya</i>	
Decision Support in Evaluating the Impacts of Mental Disorders on Work Ability .....	2958
<i>Juha Kemppinen, Jukka Korpela, Kalle Elfvingren, Timo Salmisaari, and Jussi Polkko</i>	
Factors of Access Control Management in Electronic Healthcare: The Patients' Perspective .....	2967
<i>Thomas Trojer, Basel Katt, Tülay Özata, Ruth Breu, Patrick Mangesius, and Thomas Schabetsberger</i>	

**Sensing and Pervasive Technologies and Applications for Healthcare—Co-Chairs: Freimut Bodendorf, Nilmini Wickramasinghe, and Carolin Durst**

Introduction to Sensing and Pervasive Technologies and Applications for Healthcare Minitrack .....	2977
<i>Freimut Bodendorf, Carolin Durst, and Nilmini Wickramasinghe</i>	
A Scalable Services Framework for Modeling Service Exchange Networks .....	2978
<i>Hossein Seif Zadeh, Don Lowe, and Ivan Gavanovich</i>	
Information Security and Privacy of Patient-Centered Health IT Services: What Needs to Be Done? .....	2984
<i>Tobias Dehling and Ali Sunyaev</i>	
Tackling Complexity in E-health with Actor-Network Theory .....	2994
<i>Indrit Troshani and Nilmini Wickramasinghe</i>	
Using Self-Regulation Theory to Inform Technology-Based Behavior Change Interventions .....	3004
<i>Amr Soror and Fred Davis</i>	

**Internet and the Digital Economy Track—Co-Chairs: Dave King and Alan Dennis**

Introduction to Internet and Digital Economy Track .....	3013
<i>David King and Alan Dennis</i>	

**Customer Engagement and Webflow User Experience—Co-Chairs: Petri Parvinen, Maurits Kaptein, and Harri Oinas-Kukkonen**

Introduction to Customer Engagement and Webflow User Experience Minitrack .....	3014
<i>Petri Parvinen, Harri Oinas-Kukkonen, and Maurits Kaptein</i>	
Designing Flow Experience on the Web: A Grounded Theory of Online Shopping Flow .....	3015
<i>Rolf Mahnke</i>	
Does Gamification Work?—A Literature Review of Empirical Studies on Gamification .....	3025
<i>Juho Hamari, Jonna Koivisto, and Harri Sarsa</i>	
Exploring the Effects of Information Processing Perceptions on Consumers' Website Advice	
Continuance Intention .....	3035
<i>Hui-Chih Wang and Her-Sen Doong</i>	
Flow or No Flow? A Qualitative Study of Health Behavior Change Support System .....	3044
<i>Pasi Karppinen, Tuomas Alahäivälä, Terhi Jokelainen, Anna-Maria Keränen, Tuire Salonurmi, and Harri Oinas-Kukkonen</i>	
Practical Findings from Applying Innovative Design Usability Evaluation Technologies	
for Mockups of Web Applications .....	3054
<i>Luis Rivero, Marcos Kalinowski, and Tayana Conte</i>	

**Electronic Marketing—Co-Chairs: Bruce Weinberg, Ajit Kambil, and Arnold Kamis**

Introduction to Electronic Marketing Minitrack .....	3064
<i>Bruce D. Weinberg, Arnold Kamis, and Ajit Kambil</i>	

Customer Loyalty to C2C Online Shopping Platforms: An Exploration of the Role of Customer Engagement .....	3065
<i>Christy M.K. Cheung, Xiabing Zheng, and Matthew K.O. Lee</i>	
Digital and Social Media in Pro Sports: Analysis of the 2013 UEFA Top Four .....	3073
<i>Marlen Jurisch, Helmut Kremer, Hand J. Scholl, Kai Wang, Yuan Wang, Grant Woods, Donghe Xu, and Yaxing Yao</i>	
Effects of Attribute Framing Varying with the Elaboration in Online Shopping: An Eye-Tracking Approach .....	3083
<i>Shu-Fei Yang and Hsin-Hui Lin</i>	
Paid Search: Modeling Rank Dependent Behavior .....	3093
<i>Chris K. Anderson and Ming Cheng</i>	
Real-Time Adaptation of Influence Strategies in Online Selling .....	3100
<i>Maurits Kaptein and Petri Parvinen</i>	
Running and Chasing—The Competition between Paid Search Marketing and Search Engine Optimization .....	3110
<i>Kai Li, Mei Lin, Zhangxi Lin, and Bo Xing</i>	
The Happiness Premium: The Impact of Emotion on Individuals' Willingness to Pay in Online Auctions .....	3120
<i>Lingyao (Ivy) Yuan and Alan R. Dennis</i>	
Understanding Competition Using Big Consumer Search Data .....	3129
<i>Daniel M. Ringel and Bernd Skiera</i>	
Why Aren't the Stars Aligned? An Analysis of Online Review Content and Star Ratings .....	3139
<i>Susan M. Mudambi, David Schuff, and Zhewei Zhang</i>	
<b>Innovative Behavioral IS Security and Privacy Research—Co-Chairs: Merrill Warkentin, Allen C. Johnston, and Anthony Vance</b>	
Introduction to Innovative Behavioral IS Security and Privacy Research Minitrack .....	3148
<i>Merrill Warkentin, Allen C. Johnston, and Anthony Vance</i>	
A Longitudinal Study of Information Privacy on Mobile Devices .....	3149
<i>Mark J. Keith, Jeffry S. Babb, and Paul Benjamin Lowry</i>	
A Longitudinal Study to Determine Non-technical Deterrence Effects of Severity and Communication of Internet Use Policy for Reducing Employee Internet Abuse .....	3159
<i>Morgan Shepherd, Roberto Mejias, and Gary Klein</i>	
Assessing Sunk Cost Effect on Employees' Intentions to Violate Information Security Policies in Organizations .....	3169
<i>Miranda Kajtazi, Burcu Bulgurcu, Hasan Cavusoglu, and Izak Benbasat</i>	
Factors Affecting Perceptions of Privacy Breach among Smartphone Application Users .....	3178
<i>Stanislav Mamonov and Raquel Benbunan-Fich</i>	
Improving Compliance with Password Guidelines: How User Perceptions of Passwords and Security Threats Affect Compliance with Guidelines .....	3188
<i>Florence Mwagwabi, Tanya McGill, and Michael Dixon</i>	

Location Based Services and Information Privacy Concerns among Literate and Semi-literate Users .....	3198
<i>Adrian Z.Y. Tan, Wen Yong Chua, and Klarissa T.T. Chang</i>	
Rethinking the Information Security Risk Practices: A Critical Social Theory Perspective .....	3207
<i>Devinder Thapa and Dan Harnesk</i>	
Short-Time Non-work-related Computing and Creative Performance .....	3215
<i>Jungwon Kuem and Mikko Siponen</i>	
The Effect of Providing Visualizations in Privacy Policies on Trust in Data Privacy and Security .....	3224
<i>Jörg Becker, Marcel Heddier, Ayten Öksüz, and Ralf Knackstedt</i>	
Why Individuals Commit Information Security Violations: Neural Correlates of Decision Processes and Self-Control .....	3234
<i>Qing Hu, Robert West, Laura Smarandescu, and Zachary Yaple</i>	
<b>Innovation and the Digital Economy—Co-Chairs: Christophe Vetterli and Walter Brenner</b>	
Introduction to Innovation and the Digital Economy Minitrack .....	3244
<i>Walter Brenner and Christophe Vetterli</i>	
Innovate on Purpose—Factors Contributing to Innovation in IT Outsourcing .....	3245
<i>Anna-Luise Boehm, Bjoern Michalik, Nikolaus Schmidt, and Dirk Basten</i>	
Strategic Capabilities of Mass Customization Based E-Commerce: Construct Development and Empirical Test .....	3255
<i>Frank Piller, Thorsten Harzer, Christoph Ihl, and Fabrizio Salvador</i>	
<b>Open Movements: FLOSS, Open Contents, Open Access and Open Communities—Co-Chairs: Wolfgang Bein, Clinton Jeffery, and Vandana Singh</b>	
Introduction to Open Movements Minitrack .....	3265
<i>Wolfgang Bein and Clinton Jeffery</i>	
Forge++: The Changing Landscape of FLOSS Development .....	3266
<i>Megan Squire</i>	
It's Not Only about Writing Code: An Investigation of the Notion of Citizenship Behaviors in the Context of Free/Libre/Open Source Software Communities .....	3276
<i>Kevin Daniel André Carillo, Sid Huff, and Brenda Chawner</i>	
Paid vs. Volunteer Work in Open Source .....	3286
<i>Dirk Riehle, Philipp Riemer, Carsten Kolassa, and Michael Schmidt</i>	
<b>Diffusions, Impacts, Adoption, and Use of ICTs on Society—Co-Chairs: Jyoti Choudrie, Sherah Kurnia, and Fernando Beltrán</b>	
Introduction to Diffusions, Impacts, Adoption, and Use of ICTs on Society Minitrack .....	3296
<i>Jyoti Choudrie, Sherah Kurnia, and Fernando Beltrán</i>	
An Application of UTAUT2 on Social Recommender Systems: Incorporating Social Information for Performance Expectancy .....	3297
<i>Oliver Oechslein, Marvin Fleischmann, and Thomas Hess</i>	

Diffusion and Acceptance of Cloud Computing in SMEs: Towards a Valence Model of Relevant Factors .....	3307
<i>Mark Stieninger and Dietmar Nedbal</i>	
Information Technology Availability and Use in the United States: A Multivariate and Geospatial Analysis by State .....	3317
<i>James B. Pick, Avijit Sarkar, and Jeremy Johnson</i>	
Multi-casting in Mountainous Regions of Developing Countries: Analysis through ICT, Institutions, and Capabilities Perspectives .....	3327
<i>Julian M. Bass and Devinder Thapa</i>	
Tactile Experiences: User Interpretations and Meaning with Tablets .....	3337
<i>Efpraxia D. Zamani, George M. Giaglis, and Athanasia Pouloudi</i>	
Triggering Intention to Use to Actual Use—Empirical Evidence from Self-Service Checkout (SCO) Systems .....	3347
<i>Esko Penttinen, Tapani Rinta-Kahila, Mikko Rönkkö, and Timo Saarinen</i>	
<b>Knowledge Systems Track—Co-Chairs: Dave Croasdell and Murray Jennex</b>	
Introduction to the Knowledge Systems Track .....	3356
<i>Murray Jennex and David T. Croasdell</i>	
<b>Cultural/Indigenous Knowledge Impacts on Knowledge Systems, an Intersection of Beliefs—Co-Chairs: Dave Croasdell and Nilmini Wickramasinghe</b>	
Introduction to the Minitrack on Cultural/Indigenous Knowledge Impacts on Knowledge Systems, an Intersection of Beliefs .....	3357
<i>David Croasdell and Nilmini Wickramasinghe</i>	
Cultural Identity Restoration and Purposive Website Design: A Hermeneutic Study of the Chickasaw and Klamath Tribes .....	3358
<i>Amber G. Young and Shaila M. Miranda</i>	
Deaf Culture and Sign Language Writing System—A Database for a New Approach to Writing System Recognition Technology .....	3368
<i>Cayley Guimarães, Jeferson F. Guardesi, Luis Eduardo Oliveira, and Sueli Fernandes</i>	
Indigenous Knowledge Sharing in Sarawak: A System-Level View and Its Implications for the Cultural Heritage Sector .....	3378
<i>Rashidah Bolhassan, Jocelyn Cranefield, and Dan Dorner</i>	
<b>Designing and Deploying Advanced Knowledge Systems—Co-Chairs: Stefan Smolnik and Timo Käkölä</b>	
Introduction to Designing and Deploying Advanced Knowledge Systems Minitrack .....	3389
<i>Stefan Smolnik and Timo Käkölä</i>	
Conceptual Modeling for Mobile Maintenance: The ComVantage Case .....	3390
<i>Robert Andrei Buchmann</i>	
Formal Aspects of Enterprise Modeling Methods: A Comparison Framework .....	3400
<i>Domenik Bork and Hans-Georg Fill</i>	

Quality Measures for Documentation of Best Practices .....	3410
<i>Meshari M.S. Alwazae, Erik Perjons, and Harald Kjellin</i>	
<b>From Information Systems to Knowledge Systems: Issues in Knowledge and Systems Research—Co-Chairs: Kevin Lee Elder, Alan Litchfield, and Andrew Urbaczewski</b>	
Introduction to the Minitrack From Information Systems to Knowledge Systems: Issues in Knowledge and Systems Research .....	3420
<i>Alan Litchfield and Andrew Urbaczewski</i>	
Transforming Practice Using Theoretical Framing to Improve Organizational Processes .....	3421
<i>Jordan Eschler, Shrikant Palkar, and Hazel Taylor</i>	
<b>Knowledge Management and Security—Co-Chairs: Alexandra Durcikova and Murray Jennex</b>	
Introduction to Knowledge Management and Security Minitrack .....	3431
<i>Alexandra Durcikova and Murray E. Jennex</i>	
Designing Effective Knowledge Transfer Practices to Improve IS Security Awareness and Compliance .....	3432
<i>Tonia Sannicolas-Rocca, Benjamin Schooley, and Janine L. Spears</i>	
Genre-Based Assessment of Information and Knowledge Security Risks .....	3442
<i>Ali Mohammad Padyab, Tero Päivärinta, and Dan Harnesk</i>	
Integrating IS Security with Knowledge Management: Are We Doing Enough to Thwart the Persistent Threat? .....	3452
<i>Murray Jennex and Alexandra Durcikova</i>	
<b>Knowledge Economics—Co-Chairs: Carsten Brockmann and Narcyz Roztocki</b>	
Introduction to Knowledge Economics Minitrack .....	3460
<i>Carsten Brockmann and Narcyz Roztocki</i>	
The Contours of Crowd Capability .....	3461
<i>John Prpić and Prashant Shukla</i>	
The Evolution of Knowledge Economics through the Course of Time: An Analysis of the Hawaii International Conference on System Sciences (HICSS) Minitrack .....	3471
<i>Carsten Brockmann and Narcyz Roztocki</i>	
Visualisation of Knowledge Mapping for Information Systems Evaluation: A Manufacturing Context .....	3478
<i>Amir Sharif, Muhammad Mustafa Kamal, and Zahir Irani</i>	
<b>Knowledge Flows: Knowledge Transfer, Sharing, and Exchange—Co-Chairs: K.D. Joshi, Mark Nissen, and Lynne Cooper</b>	
Introduction to Knowledge Flows: Knowledge Transfer, Sharing, and Exchange Minitrack .....	3488
<i>K.D. Joshi, Mark E. Nissen, and Lynne Cooper</i>	
A Social Capital Perspective to Understand Individual Contribution of Social Support in Healthcare Virtual Support Communities .....	3489
<i>Kuang-Yuan Huang and Indushobha Chengalur-Smith</i>	

Creation of Need Knowledge in Organizations: An Abductive Framework .....	3499
<i>Alexander Kaiser, Birgit Fordinal, and Florian Kragulj</i>	
Error Occurrence: Successful versus Unsuccessful Unlearning in Individuals .....	3509
<i>Julee H. Hafner, Timothy J. Ellis, and William Hafner</i>	
Individuals' Interaction with Organizational Knowledge under Innovative and Affective Team	
Climates: A Multilevel Approach to Knowledge Adoption and Transformation .....	3515
<i>Jinyoung Min, Junyeong Lee, Sunghan Ryu, and Heeseok Lee</i>	
Information Quality: The Importance of Context and Trade-Offs .....	3525
<i>Anna L. McNab and D. Alan Ladd</i>	
Sustainable Value and Generativity in the Ecological Metadata Language (EML) Platform:	
Toward New Knowledge and Investigations .....	3533
<i>Ben Li</i>	
Towards a Knowledge-Based Framework for Enterprise Content Management .....	3543
<i>Thang Le Dinh, Tim A. Rickenberg, Hans-Georg Fill, and Michael H. Breitner</i>	
Within-Team Variation of Shared Knowledge Structures: A Business Performance Study .....	3553
<i>Ronald Freeze and Pamela Schmidt</i>	
<b>Knowledge Management for Innovation, Agility, and Complexity Management—Co-Chairs: Suzanne Zyngier, Danny Samson, and Marianne Gloet</b>	
Introduction to Knowledge Management for Innovation, Agility, and Complexity Management	
Minitrack .....	3563
<i>Suzanne Zyngier, Marianne Gleot, and Danny Samson</i>	
A Framework for Positioning and Assessing Innovation Capability from an Organizational Perspective .....	3564
<i>Lilibeth Rodríguez, Jessica Díaz, Juan Garbajosa, Jennifer Pérez, and Agustín Yagüe</i>	
Managing Knowledge and Innovation for Performance .....	3574
<i>Marianne Gloet and Danny Samson</i>	
Organizational Ambidexterity Building via Strategic Learning and Business Learning .....	3584
<i>Yan Mengling, Yu Yan, and Dong Xiaoying</i>	
Things to Maintain or Change: The Importance of Critical Territory in Post-acquisition Integration Boundary Issues .....	3594
<i>Dongcheol Heo and Heeseok Lee</i>	
<b>Knowledge Management Value, Success, and Performance Measurements—Co-Chairs: Murray Jennex, Stefan Smolnik, and David Croasdell</b>	
Introduction to Knowledge Management Value, Success, and Performance Measurements	
Minitrack .....	3604
<i>Murray E. Jennex, Stefan Smolnik, and David T. Croasdell</i>	
Enhancing the Motivation, Opportunity, and Ability of Knowledge Workers to Participate in Knowledge Exchange .....	3605
<i>Kelly J. Fadel and Alexandra Durcikova</i>	

Knowledge Management Success in Practice .....	3615
<i>Murray E. Jennex, Sefan Smolnik, and David Croasdell</i>	
Profile in Leadership: Adding Definition to Leadership as a Component of KMS Success .....	3625
<i>Vincent Scovetta and Timothy J. Ellis</i>	
Shedding Light on the Impact Dimension of Information Systems Success: A Synthesis of the Literature .....	3635
<i>Andrea Herbst, Nils Urbach, and Jan vom Brocke</i>	
The Relationship between KM Strategies and IT Applications in SMEs .....	3645
<i>Naief Azyabi, Julie Fisher, Kerry Tanner, and Shijia Gao</i>	
<b>Organizational Systems and Technology Track—Chair: Hugh Watson</b>	
Introduction to Organizational Systems and Technology Track .....	3655
<i>Hugh J. Watson</i>	
<b>Advances in Design Research for Information Systems—Co-Chairs: Joseph Walls, George Widmeyer, and Omar El Sawy</b>	
Introduction to Advances in Design Research for Information Systems Minitrack .....	3656
<i>Joseph Walls, George Widmeyer, and Omar El Sawy</i>	
A Prototype for Information-Dense IT Project Risk Reporting: An Action Design Research Approach .....	3657
<i>Martina Beer, Marco C. Meier, Benjamin Mosig, and Florian Probst</i>	
Activity-Based Costing as a Design Science Artifact .....	3667
<i>Philip Huysmans and Peter De Bruyn</i>	
An Information System Design Product Theory for the Abstract Class of Integrated Requirements and Delivery Management Systems .....	3677
<i>Yikun Lu and Timo Käkölä</i>	
Introducing a Game Approach Towards IS Requirements Specification .....	3687
<i>Mika Yasuoka, Kyoichi Kadoya, and Takashi Niwa</i>	
Logic for Accumulation of Design Science Research Theory .....	3697
<i>Jan Holmström, Tuure Tunanen, and Jouni Kauremaa</i>	
Towards a Design Theory for Trustworthy Information Systems .....	3707
<i>Leslie J. Waguespack, David J. Yates, and William T. Schiano</i>	
Using Entropy's Justificatory Knowledge for a Business Process Design Theory .....	3717
<i>Peter De Bruyn, Philip Huysmans, Gilles Oorts, Herwig Mannaert, and Jan Verelst</i>	
<b>Business Analytics, Business Intelligence, and Big Data—Co-Chairs: Olivera Marjanovic, Thilini Ariyachandra, and Barbara Dinter</b>	
Introduction to Business Analytics, Business Intelligence, and Big Data Minitrack .....	3727
<i>Olivera Marjanovic, Thilini Ariyachandra, and Barbara Dinter</i>	
Social Media Analytics and Business Value: A Theoretical Framework and Case Study .....	3728
<i>Nargiza Bekmamedova and Graeme Shanks</i>	

Structuring Collaborative Business Intelligence: A Literature Review .....	3738
<i>Jens Kaufmann and Peter Chamoni</i>	
Think Big with Big Data: Identifying Suitable Big Data Strategies in Corporate Environments .....	3748
<i>Katharina Ebner, Thilo Bühnen, and Nils Urbach</i>	
User Acceptance of Business Intelligence (BI) Application: Technology, Individual Difference, Social Influence, and Situational Constraints .....	3758
<i>Tom E. Yoon, Biswadip Ghosh, and Bong-Keun Jeong</i>	
<b>Business and Enterprise Architecture: Processes, Approaches, and Challenges—Co-Chairs: Frank Armour and Steve Kaisler</b>	
Introduction to Business and Enterprise Architecture: Processes, Approaches, and Challenges Minitrack .....	3767
<i>Frank Armour and Stephen Kaisler</i>	
Business Process Modeling Language for Performance Evaluation .....	3768
<i>Azeem Lodhi, Veit Köppen, Stefan Wind, Gunter Saake, and Klaus Turowski</i>	
Dynamics of Cloud-Based Software as a Service in Small Communities of Complex Organizations .....	3778
<i>Jenny Leonard</i>	
Enterprise Architecture Practice and Organizational Agility: An Exploratory Study .....	3788
<i>Terje Fallmyr and Bendik Bygstad</i>	
EVOLIS Framework: A Method to Study Information Systems Evolution Records .....	3798
<i>Alexandre Métrailler and Thibault Estier</i>	
Green Business Process Management—A Definition and Research Framework .....	3808
<i>Nicky Opitz, Henning Krüp, and Lutz M. Kolbe</i>	
Optimizing the Performance of Automated Business Processes Executed on Virtualized Infrastructure .....	3818
<i>Christian Janiesch, Ingo Weber, Jörn Kuhlenkamp, and Michael Menzel</i>	
Toward a Decision Model for Master Data Application Architecture .....	3827
<i>Ehsan Baghi, Simon Schlosser, Verena Ebner, Boris Otto, and Hubert Oesterle</i>	
Toward a Functional Reference Model for Business Rules Management .....	3837
<i>Simon Schlosser, Ehsan Baghi, Boris Otto, and Hubert Oesterle</i>	
Visualizing and Measuring Enterprise Application Architecture: An Exploratory Telecom Case .....	3847
<i>Robert Lagerström, Carliss Baldwin, Alan MacCormack, and Stephan Aier</i>	
<b>Business Process Intelligence—Co-Chairs: Harry Jiannan Wang, Amit V. Deokar, and Surendra Sarnikar</b>	
Introduction to Business Process Intelligence Minitrack .....	3857
<i>Harry Jiannan Wang, Amit V. Deokar, and Surendra Sarnikar</i>	
A Case Study on Analyzing Inter-organizational Business Processes from EDI Messages Using Physical Activity Mining .....	3858
<i>Robert Engel and R.P. Jagadeesh Chandra Bose</i>	
Challenges of Social Business Process Management .....	3868
<i>Nicolas Pflanzl and Gottfried Vossen</i>	

Development of an Intelligent Maturity Model-Tool for Business Process Management .....	3878
<i>Nico Krivograd, Peter Fettke, and Peter Loos</i>	
Improving Structure: Logical Sequencing of Mined Process Models .....	3888
<i>Michael Werner and Markus Nüttgens</i>	
Mining Knowledge Sharing Processes in Online Discussion Forums .....	3898
<i>G. Alan Wang, Harry Jiannan Wang, Jieyun Li, and Weiguo Fan</i>	
<b>Digital Technologies and Organizational Innovation—Co-Chairs: Nicholas Berente, Kalle Lyytinen, and Youngjin Yoo</b>	
Introduction to Digital Technologies and Organizational Innovation Minitrack .....	3908
<i>Nicholas Berente, Kalle Lyytinen, and Youngjin Yoo</i>	
Architectural Characteristics of Digital Services Enabled by Embedded Technology: A Study on Remote Diagnostics Services .....	3909
<i>Soumitra Chowdhury, Magnus Bergquist, and Maria Åkesson</i>	
Business Models of Developer Platforms in the Telecommunications Industry—An Explorative Case Study Analysis .....	3919
<i>Hannes Kuebel, Felix Limbach, and Ruediger Zarnekow</i>	
Computer Aided Business Model Design: Analysis of Key Features Adopted by Users .....	3929
<i>Boris Fritscher and Yves Pigneur</i>	
IT Capability Configurations for Innovation: An Empirical Study of Industrial SMEs .....	3939
<i>Louis Raymond, Sylvestre Uwizeyemungu, Bruno Fabi, and Josée St-Pierre</i>	
Structural and Behavioral Fit in Software Sourcing Alignment .....	3949
<i>Marko Nöhren, Armin Heinzl, and Thomas Kude</i>	
Succeeding with Building Information Modeling: A Case Study of BIM Diffusion in a Healthcare Construction Project .....	3959
<i>Christoph Merschbrock and Bjørn Erik Munkvold</i>	
<b>Emerging Issues Facing the Computing Workforce—Co-Chairs: Cynthia Riemenschneider and Deborah J. Armstrong</b>	
Introduction to Emerging Issues Facing the Computing Workforce Minitrack .....	3969
<i>Cynthia K. Riemenschneider and Deborah J. Armstrong</i>	
IT Professionals and Their Psychological Contract in the IT Profession .....	3970
<i>René Moquin and Cindy K. Riemenschneider</i>	
The Role of Voice in Retention of IT Workers: Paving the Higher Road .....	3980
<i>Andrea J. Hester, Jo Ellen Moore, and Susan E. Yager</i>	
Toward an Understanding of Job Satisfaction on Agile Teams: Agile Development as Work Redesign .....	3993
<i>John F. Tripp and Cynthia K. Riemenschneider</i>	
What Do We Know about FLOSS Developers' Attraction, Retention, and Commitment? A Literature Review .....	4003
<i>Andreas Schilling</i>	

Why IS after All? An Explorative Analysis of Professionals' Letters of Study Motivation .....	4013
<i>Steffen Illig, Sven Laumer, Christian Maier, and Tim Weitzel</i>	

**Enterprise System Integration: Issues and Answers—Co-Chairs: Marinos Themistocleous, Gail Corbitt, and Paulo Rupino da Cunha**

Introduction to Enterprise System Integration: Issues and Answers Minitrack .....	4023
---	------

*Gail Corbitt, Marinos Themistocleous, and Paulo Rupino Da Cunha*

Coping with Requirements Uncertainty—A Case Study of an Enterprise-Wide Record
--

Management System .....	4024
-------------------------	------

*Bjoern Michalik, Marcus Keutel, and Werner Mellis*

Strategic Alignment of Enterprise Systems and Business Strategies under Systems and Bivariate
---

Approaches .....	4034
------------------	------

*Nazim Taskin, Jacques Verville, and Tayfun Keskin*

The Impact Mechanism of Organizational Culture on ERP Assimilation: A Multi-case Study .....	4044
--	------

*Yuanyuan Guo, Yuqiang Feng, and Chaoyou Wang*

**Information Economics, Competition, Regulation, Law, and Society—Co-Chairs: Eric Clemons, Rob Kauffman, and Tom Weber**

Introduction to Information Economics, Competition, Regulation, Law, and Society Minitrack .....	4054
--	------

*Eric K. Clemons, Robert J. Kauffman, and Thomas A. Weber*

How Can Substitution and Complementarity Effects Be Leveraged for Broadband Internet
--

Services Strategy? .....	4055
--------------------------	------

*Gwangjae Jung, Youngsoo Kim, and Robert J. Kauffman*

How Should Carriage Disputes in Digital Media Be Addressed? .....	4064
---	------

*Frank MacCrory and Shivendu Shivendu*

Incentive Issues and Solution Mechanisms for Knowledge Transfer with Enterprise 2.0
---

Technologies: A Game-Theoretic Approach .....	4074
---	------

*Xianjun Geng, Lihui Lin, and Andrew B. Whinston*

Investigations into Consumers Preferences Concerning Privacy: An Initial Step towards
---

the Development of Modern and Consistent Privacy Protections around the Globe .....	4083
---	------

*Eric K. Clemons, Josh Wilson, and Fujie Jin*

IT Investments and Firm Stock Market Value: The Mediating Role of Stock Analysts .....	4093
--	------

*Xueming Luo, Bin Gu, and Cheng Zhang*

News Processing during Speculative Bubbles: Evidence from the Oil Market .....	4103
--	------

*Stefan Feuerriegel, Max W. Lampe, and Dirk Neumann*

Product Versus Non-product Oriented Social Media Platforms: Online Consumer Opinion
---

Composition and Evolution .....	4113
---------------------------------	------

*Jianxiong Huang, Waifong Boh, and Kim Huat Goh*

The Role of Disseminative Capacity in HIT Adoption: An Empirical Analysis .....	4123
---	------

*Debabrata Dey, Atanu Lahiri, and Gang Peng*

Collaborative Housing and the Intermediation of Moral Hazard .....	4133
--	------

*Thomas A. Weber*

Elimination by Aspects in Electronic Commerce—Evidence from Online Marketplace and Implications for Empirical Model Specification .....	4142
<i>Mohan Wang, Bin Gu, and Qiang Ye</i>	
Evaluating Electronic Market Designs: The Effects of Competitive Arousal and Social Facilitation on Electronic Group Buying .....	4148
<i>Martin Yuecheng Yu, Karl R. Lang, and Alex Pelaez</i>	
<b>Information and Information Systems in Crisis Response—Co-Chairs: Dorothy E. Leidner, Anouck Adrot, and Eric W.T. Ngai</b>	
Introduction to Information and Information Systems in Crisis Response Minitrack .....	4158
<i>Dorothy E. Leidner and Anouck Adrot</i>	
Designing an Optimized Alert System Based on Geospatial Location Data .....	4159
<i>Kimberly Zeitz, Randy Marchany, and Joseph Tront</i>	
Semantic Representations of Actors and Resource Allocation through Reasoning in Humanitarian Crises .....	4169
<i>Aladdin Shamoug, Radmila Juric, and Shamimabi Paurobally</i>	
<b>Information Issues in Supply Chain and in Service System Design—Co-Chairs: Abraham Seidmann, Yabing Jiang, and Jie Zhang</b>	
Introduction to Information Issues in Supply Chain and in Service System Design Minitrack .....	4179
<i>Abraham Seidmann, Yabing Jiang, and Jie Zhang</i>	
Do Competitive Environments Have an Effect on Managerial Decision Making? An Empirical Investigation of the Newsvendor Problem .....	4180
<i>Tong Wu and Abraham Seidmann</i>	
From Bits to Atoms: 3D Printing in the Context of Supply Chain Strategies .....	4190
<i>Henrik J. Nyman and Peter Sarlin</i>	
Greening the Service Selection in Cloud Computing: The Case of Federated ERP Solutions .....	4200
<i>Holger Schrödl and Paulina Simkin</i>	
IT Outsourcing: An IS Perspective .....	4210
<i>Stefan Bensch, Ralph-Josef Andris, Christian Gahm, and Axel Tuma</i>	
Quantitative Case Study: Use of Pharmacy Patient Information Systems to Improve Operational Efficiency .....	4220
<i>Gregory Dobson, David Tilson, Vera Tilson, and Curtis E. Haas</i>	
Relational Capital and Performance: Assessing the Mediating Role of Supply Chain Agility and the Moderating Role of Environmental Contexts .....	4229
<i>Zhao Cai, Hefu Liu, Qian Huang, Liang Liang, and Xiao-Liang Shen</i>	
Teleophthalmology for Diabetic Patients: Saving Vision through IT .....	4239
<i>Balaraman Rajan, Abraham Seidmann, and Rajeev Ramchandran</i>	

**Information Technology for Development—Co-Chairs: Mehruz Kamal, Sajda Qureshi, and James Pick**

Introduction to Information Technology for Development Minitrack .....	4244
<i>Mehruz Kamal, Sajda Qureshi, and James B. Pick</i>	
Achieving Development Outcomes through Technology Interventions in a Nonprofit Organization .....	4245
<i>Mehruz Kamal</i>	
Aligning IT Capabilities with the Information Requirements of International SMEs: Information Processing Theory Revisited .....	4254
<i>Vincent Dutot, François Bergeron, and Louis Raymond</i>	
Steering Institutionalization through Institutional Work: The Case of an eProcurement System in Indonesian Local Government .....	4264
<i>Fathul Wahid and Maung K. Sein</i>	

**IT and Project Management—Co-Chairs: Sue Newell, Jacky Swan, and Joseph Weiss**

Introduction to IT and Project Management Minitrack .....	4275
<i>Joseph Weiss, Jacky Swan, and Sue Newell</i>	
Explaining Emergence and Consequences of Specific Formal Controls in IS Outsourcing—A Process-View .....	4276
<i>Thomas L. Huber, Thomas A. Fischer, Laurie Kirsch, and Jens Dibbern</i>	
Exploring the Constituents of Benefits Management: Identifying Factors Necessary for the Successful Realization of Value of Information Technology .....	4286
<i>Kunal Mohan, Frederik Ahlemann, and Jessica Braun</i>	
Is a Challenged Project One of the Final Outcomes for an IT Project? .....	4296
<i>Umar A. Altaooth and Margaret W. Emsley</i>	
Reducing I.T. Project Management Failures: Early Empirical Results .....	4305
<i>Gezinus J. Hidding and John M. Nicholas</i>	
Rethinking Communication in IT Project Management .....	4315
<i>Judy McKay, Peter Marshall, and Nick Grainger</i>	
Risk Management in Video Game Development Projects .....	4325
<i>Marc Schmlaz, Aimee Finn, and Hazel Taylor</i>	

**IT Governance and Its Mechanisms—Chair: Wim Van Grembergen**

Introduction to IT Governance and Its Mechanisms Minitrack .....	4335
<i>Wim Van Grembergen</i>	
A Nomological Network Analysis of Research on Information Security Management Systems .....	4336
<i>Fernando Parra and Laura L. Hall</i>	
Does Inclusion of CIO in Top Management Team Impact Firm Performance? Evidence from a Long-Term Event Analysis .....	4346
<i>Qing Hu, Ali Alper Yayla, and Yu Lei</i>	

E-Business IT Governance Revisited: An Attempt towards Outlining a Novel Bi-directional Business/IT Alignment in COBIT5 .....	4356
<i>Yannick Bartens, Frederik Schulte, and Stefan Voß</i>	
Evolvement of Business-IT Alignment over Time: A Situated Change Perspective .....	4366
<i>Heinz-Theo Wagner</i>	
IT Governance Effectiveness and Its Antecedents: An Empirical Examination in Brazilian Firms .....	4376
<i>Guilherme Lerch Lunardi, Antonio Carlos G. Maçada, and João Luiz Becker</i>	
IT Governance Patterns in the Portuguese Financial Industry .....	4386
<i>Ruben Pereira, Rafael Almeida, and Miguel Mira da Silva</i>	
Middle Management and Information Systems Strategy: The Role of Awareness and Involvement .....	4396
<i>Dorothy E. Leidner and Michael Milovich Jr.</i>	
On the Need for Evolvability Assessment in Value Management .....	4406
<i>Kim Maes, Peter De Bruyn, Gilles Oorts, and Philip Huysmans</i>	
On the Relevance of the Modularity Concept for Understanding Outsourcing Risk Factors .....	4416
<i>Philip Huysmans, Peter De Bruyn, Shazdada Benazeer, Alain De Beuckelaer, Steven De Haes, and Jan Verelst</i>	
The Board and CIO: The IT Alignment Challenge .....	4426
<i>Jacques Coertze and Rossouw Von Solms</i>	
The Influence of Culture on IT Governance: A Literature Review .....	4436
<i>Parisa Aasi, Lazar Rusu, and Shengnan Han</i>	
Towards an Application Life-Cycle Approach for Selective Outsourcing .....	4446
<i>Saskia Zelt, Alexander Andreas Neff, Jochen Wulf, Falk Uebenickel, and Walter Brenner</i>	
<b>Organizational and Social Dynamics in Information Technology—Co-Chairs: Michael Knight, Dawn Medlin, and Dragos Vieru</b>	
Introduction to Organizational and Social Dynamics in Information Technology Minitrack .....	4456
<i>Michael B. Knight and B. Dawn Medlin</i>	
A Nexus Analysis of Participation in Building an Information Infrastructure for the “Future School” .....	4457
<i>Halkola Eija, Iivari Netta, Kinnula Marianne, Kuure Leena, and Molin-Juustila Tonja</i>	
Accelerating Economic Inequality and the Moral Responsibilities of Corporate-Employed Technologists .....	4467
<i>Alan E. Singer</i>	
How Coaligned Stakeholder Support Enhances End User's Perceived ERP Performance? The Pivotal Role of ERP Identity .....	4474
<i>Jeffrey C.F. Tai, Kai Wang, and Hsin-Lu Chang</i>	
Managing the Achievement of Strategic Organizational Goals through Projects: Understanding the Role of Management Practices .....	4484
<i>Kunal Mohan and Frederik Ahleman</i>	
When Too Much Usage is Too Much: Exploring the Process of IT Addiction .....	4494
<i>Isaac Vaghefi and Liette Lapointe</i>	

Young People and Smart Phones: An Empirical Study on Information Security .....	4504
<i>Balbir S. Barn, Ravinder Barn, and Jo-Pei Tan</i>	
<b>Tensions, Emergence, and Generative Mechanisms in Complex Sociotechnical Systems—Co-Chairs: Sirkka Jarvenpaa and Holly Lanham</b>	
Introduction to Tensions, Emergence, and Generative Mechanisms in Complex Sociotechnical Systems Minitrack .....	4515
<i>Sirkka L. Jarvenpaa and Holly J. Lanham</i>	
Digital Visions vs. Product Practices: Understanding Tensions in Incumbent Manufacturing Firms .....	4516
<i>Asif Akram, Magnus Bergquist, and Maria Åkesson</i>	
How Did It Happen? A Memetic Theory of Interorganizational Information Systems Emergence and Evolution .....	4526
<i>Thayanan Phuaphanthong and Tung Bui</i>	
Learning at the Boundaries: An Action Agenda for Business Analysts .....	4536
<i>Rajiv Vashist, Judith McKay, and Peter Marshall</i>	
Reimagining the Higher Education Experience as a Socially-Enabled Complex Adaptive System .....	4546
<i>Munir Mandviwalla and David Schuff</i>	
Solving the Puzzle of Crowdfunding: Where Technology Affordances and Institutional Entrepreneurship Collide .....	4556
<i>Claire Ingram, Robin Teigland, and Emmanuelle Vaast</i>	
Theorizing Modes of Open Source Software Development .....	4568
<i>A. Lindberg, Xuan Xiao, and Kalle Lyytinen</i>	
Trust in Network Organizations—A Literature Review on Emergent and Evolving Behavior in Network Organizations .....	4578
<i>Marcel Morisse, Bettina Horlach, Wiebke Kappenberg, Jurate Petrikina, Florian Robel, and Florian Steffens</i>	
<b>Theories in IS Research—Co-Chairs: Scott Schneberger, Dirk Hovorka, and Kai Larsen</b>	
Introduction to Theories in IS Research Minitrack .....	4588
<i>Scott L. Schneberger, Dirk S. Hovorka, and Kai R. Larsen</i>	
Applications of the Viable Systems Model in IS Research—A Comprehensive Overview and Analysis .....	4589
<i>Janek Richter and Dirk Basten</i>	
Crafting Theory to Satisfy the Requirements of Explanation .....	4599
<i>Allen S. Lee, Robert (Bob) Briggs, and Alan R. Dennis</i>	
Do Ontological Guidelines Improve Understandability of Conceptual Models? A Meta-analysis of Empirical Work .....	4609
<i>Arash Saghaei and Yair Wand</i>	
Identifying IT User Mindsets: Acceptance, Resistance and Ambivalence .....	4619
<i>Liette Lapointe and Anne Beaudry</i>	

The Intellectual Core of the IS Field: A Systematic Exploration of Theories in Our Top Journals .....	4629
<i>Daniel S. Soper, Ofir Turel, and Nitza Geri</i>	
Theory Identity: A Machine-Learning Approach .....	4639
<i>Kai R. Larsen, Dirk Hovorka, Jevin West, James Birt, James R. Pfaff, Trevor W. Chambers, Zebula R. Sampedro, Nick Zager, and Bruce Vanstone</i>	
<b>Topics in Organizational Systems and Technology—Co-Chairs: Mark Frolick, Kelly Rainer, and Jim Ryan</b>	
Introduction to Topics in Organizational Systems and Technology Minitrack .....	4649
<i>Mark N. Frolick, Kelly Rainer, and Jim Ryan</i>	
Antecedents of IT Outsourcing—A Longitudinal Approach .....	4650
<i>Ralph Pfaller, Marina Fiedler, Arnold Picot, and Anja Tuschke</i>	
Does IT Reputation Matter? Role of Senior Executives .....	4660
<i>Jee-Hae Lim, Theophanis C. Stratopoulos, and Tony Wirjanto</i>	
One Country, Three Types of CIOs: The Emergence of Technology Executives in China .....	4670
<i>Mark W.S. Chun, Kai Sung, Charla Griffy-Brown, and Harvey Koeppl</i>	
Paving the Way to a Productive RFID System: A Novel Action Research Based Study from Fashion Retail .....	4680
<i>Thomas Buckel and Frédéric Thiesse</i>	
Perceptual Differences and Conflict in Packaged Software Acquisition: Results from a Multi-perspective Framing Analysis .....	4690
<i>Stefan Harnisch, Jasmin Kaiser, and Peter Buxmann</i>	
Process-Driven Data Quality Management—An Application of the Combined Conceptual Life Cycle Model .....	4700
<i>Paul Glowalla, Patryk Balazy, Dirk Basten, and Ali Sunyaev</i>	
<b>Software Technology Track—Co-Chairs: Gul Agha and Rick Kazman</b>	
Introduction to Software Technology Track .....	4710
<i>Rick Kazman and Gul Agha</i>	
<b>Agile and Lean Organizations: Management, Metrics, and Products—Chair: Dan Greening</b>	
Introduction to Agile and Lean Organizations: Management, Metrics, and Products Minitrack .....	4711
<i>Daniel R. Greening</i>	
State-of-the-Art: A Systematic Literature Review on Agile Information Systems Development .....	4712
<i>Markus Hummel</i>	
Teams That Finish Early Accelerate Faster: A Pattern Language for High Performing Scrum Teams .....	4722
<i>Jeff Sutherland, Neil Harrison, and Joel Riddle</i>	
The Influence of Organizational Factors on Inter-team Knowledge Sharing Effectiveness in Agile Environments .....	4729
<i>Viviane Santos, Alfredo Goldman, Hernesto Filho, Débora Martins, and Mariela Cortés</i>	
Theme-Based Product Release Planning: An Analytical Approach .....	4739
<i>Nishant Agarwal, Reza Karimpour, and Guenther Ruhe</i>	

Toward an Understanding of Preference for Agile Software Development Methods from a Personality Theory Perspective .....	4749
--	------

*David Bishop and Amit Deokar*

### **Agile and Lean Software Engineering—Co-Chairs: Ashley Aitken and Jay Trimble**

Introduction to Agile and Lean Software Engineering Minitrack .....	4759
---	------

*Ashley Aitken and Jay Trimble*

Building Evolvable Software Using Normalized Systems Theory: A Case Study .....	4760
---	------

*Gilles Oorts, Philip Huysmans, Peter De Bruyn, Herwig Mannaert, Jan Verelst, and Arco Oost*

Combining Lean Thinking and Agile Methods for Software Development: A Case Study of a Finnish Provider of Wireless Embedded Systems Detailed .....	4770
--	------

*Pilar Rodríguez, Jari Partanen, Pasi Kuvaja, and Markku Oivo*

Coordination in Large-Scale Agile Software Development: A Multiteam Systems Perspective .....	4780
---	------

*Alexander Scheerer, Tobias Hildenbrand, and Thomas Kude*

Dual Application Model for Agile Software Engineering .....	4789
---	------

*Ashley Aitken*

Exploring the Relationship between Organizational Adoption Motives and the Tailoring of Agile Methods .....	4799
---	------

*John F. Tripp and Deborah J. Armstrong*

Guiding Flexibility Investment in Agile Architecting .....	4807
--	------

*Carlos Fernández-Sánchez, Jessica Díaz, Jennifer Pérez, and Juan Garbajosa*

Towards the Model Driven Organization .....	4817
---	------

*Tony Clark, Vinay Kulkarni, Balbir Barn, Robert France, Ulrich Frank, and Dan Turk*

### **Digital Forensics: Education, Research, and Practice—Co-Chairs: Kara Nance and Matt Bishop**

Introduction to Digital Forensics: Education, Research, and Practice Minitrack .....	4827
--	------

*Kara Nance and Matt Bishop*

Android Anti-forensics: Modifying CyanogenMod .....	4828
---	------

*Karl-Johan Karlsson and William Bradley Glisson*

iOS Anti-forensics: How Can We Securely Conceal, Delete and Insert Data? .....	4838
--	------

*Christian D’Orazio, Aswami Ariffin, and Kim-Kwang Raymond Choo*

Teaching Digital Forensics Techniques within Linux Environments .....	4848
---	------

*Lucas McDaniel and Brian Hay*

### **Enlightened Cybersecurity and Software Assurance—Co-Chairs: Luanne Burns Goldrich, Richard Linger, and Richard George**

Introduction to Enlightened Cybersecurity and Software Assurance Minitrack .....	4857
--	------

*Luanne Burns Goldrich, Richard Linger, and Richard George*

A Study of Ten Popular Android Mobile VoIP Applications: Are the Communications Encrypted? .....	4858
--	------

*Abdullah Azfar, Kim-Kwang Raymond Choo, and Lin Liu*

Evolving Secure Information Systems through Attack Simulation .....	4868
<i>Elmar Kiesling, Andreas Ekelhart, Bernhard Grill, Christian Stummer, and Christine Strauss</i>	
Patcher: An Online Service for Detecting, Viewing and Patching Web Application	
Vulnerabilities .....	4878
<i>Fang Yu and Yi-Yang Tung</i>	
REQcollect: Requirements Collection, Project Matching and Technology Transition .....	4887
<i>Luanne Goldrich, Stephen Hamer, Martha McNeil, Thomas Longstaff, Robert Gatlin, and Emmanuel Bello-Ogunu</i>	
Signature Based Intrusion Detection for Zero-Day Attacks: (Not) A Closed Chapter? .....	4895
<i>Hannes Holm</i>	
Towards a Holistic Understanding of Security Process: Formal Controls and Informal Relationships .....	4905
<i>Max Soyref and Philip Seltsikas</i>	
Utilizing Attack Graphs to Measure the Efficacy of Security Frameworks across Multiple Applications .....	4915
<i>Francis J. Manning III and Frank J. Mitropoulos</i>	
<b>IS Education and Training—Co-Chairs: Dan Port and Gary Kessler</b>	
Introduction to IS Education and Training Minitrack .....	4921
<i>Daniel Port and Gary C. Kessler</i>	
(Un)Bundled Services: A Stakeholder's Framework for Understanding the Impact of MOOC-Like, Third-Party Online Courses .....	4922
<i>James H. Melton, Robert E. Miller, and Anil Kumar</i>	
A Proposed Curriculum in Cybersecurity Education Targeting Homeland Security Students .....	4932
<i>Gary C. Kessler and James D. Ramsay</i>	
Developing Faculty Expertise in Information Assurance through Case Studies and Hands-On Experiences .....	4938
<i>Xiaohong Yuan, Kenneth Williams, Huiming Yu, Bei-Tseng Chu, Audrey Rorrer, Li Yang, Kathy Winters, and Joseph Kizza</i>	
Exploring the Feasibility of Conducting Software Training in a Peer Learning Context with the Aid of Student-Produced Screencasts .....	4946
<i>Tai-Yin Chi, Lorne Olfman, and Frank Lin</i>	
Investigating User Acceptance of a Screenshot-Based Interaction System in the Context of Advanced Computer Software Learning .....	4956
<i>Travis K. Huang</i>	
Learning and Law Enforcement: How Community-Based Teaching Facilitates Improved Information Systems .....	4966
<i>Kaethe Bect, Scott Beamon, Edward Delp, and David Ebert</i>	
Teaching Theories Underlying Agile Methods in a Systems Development Course .....	4970
<i>Adarsh Kumar Kakar</i>	
The Hidden Job Requirements for a Software Engineer .....	4979
<i>Cristina Marinovici, Harold Kirkham, and Kevin Glass</i>	

## **Secure Cloud Computing—Co-Chairs: Bill Yeager and Jean-Henry Morin**

Introduction to Secure Cloud Computing Minitrack .....	4985
<i>William J. Yeager and Jean-Henry Morin</i>	
A Policy-Based Security Framework for Storage and Computation on Enterprise Data in the Cloud .....	4986
<i>Sourya Joyee De and Asim K. Pal</i>	
A Taxonomic Perspective on Certification Schemes: Development of a Taxonomy for Cloud Service Certification Criteria .....	4998
<i>Stephan Schneider, Jens Lansing, Fangjian Gao, and Ali Sunyaev</i>	
Analysis of Monolithic and Microkernel Architectures: Towards Secure Hypervisor Design .....	5008
<i>Jordan Shropshire</i>	
Cloud Computing Data Protection—A Literature Review and Analysis .....	5018
<i>Florian Pfarr, Thomas Buckel, and Axel Winkelmann</i>	
Securing KVM-Based Cloud Systems via Virtualization Introspection .....	5028
<i>Sheng-Wei Lee and Fang Yu</i>	
SLA Information Management through Dependency Digraphs: The Case of Cloud Data Services .....	5038
<i>Katerina Stamou, Verena Kantere, Jean-Henry Morin, and Michael Georgiou</i>	

## **Software Product Lines: Engineering, Services, and Management—Co-Chairs: Timo Käkölä and Andrea Leitner**

Introduction to Software Product Lines: Engineering, Services, and Management Minitrack .....	5048
<i>Timo Käkölä and Andrea Leitner</i>	
Analyzing Software Product Innovation Assessment by Using a Systematic Literature Review .....	5049
<i>Agustín Yagüe, Juan Garbajosa, Jennifer Pérez, and Jessica Díaz</i>	
Which Factors Affect Software-as-a-Service Selection the Most? A Study from the Customer’s and the Vendor’s Perspective .....	5059
<i>Ariana Polyviou, Nancy Pouloudi, and Stamatia Rizou</i>	

## **Software Security for Mobile Platforms—Co-Chairs: Daniel Plakosh and Robert Seacord**

Introduction to Software Security for Mobile Platforms Minitrack .....	5069
<i>Daniel Plakosh and Robert Seacord</i>	
Enhancing User Privacy on Android Mobile Devices via Permissions Removal .....	5070
<i>Quang Do, Ben Martini, and Kim-Kwang Raymond Choo</i>	
Malware Dynamic Recompilation .....	5080
<i>Sébastien Josse</i>	
Pointer Ownership Model .....	5090
<i>David Svoboda and Lutz Wrage</i>	

## Wireless Networks—Co-Chairs: Edoardo Biagioni, John McEachen, and Murali Tummala

Introduction to Wireless Networks Minitrack .....	5100
<i>Edoardo Biagioni, John McEachen, and Murali Tummala</i>	
A Scalable Hidden-Markov Model Algorithm for Location-Based Services in WiMAX Networks .....	5101
<i>John Roth, Murali Tummala, John McEachen, and James Scrofani</i>	
Cell Range Expansion and Time Partitioning for Enhanced Inter-cell Interference Coordination in Heterogeneous Network .....	5109
<i>Angmi Moon, Saransh Malik, Bora Kim, Hun Choi, Sooman Park, Cheolsung Kim, and Intae Hwang</i>	
Novel MCS Based Relay Protocols for Throughput Optimization Using AMC in LTE-Advanced System .....	5114
<i>Saransh Malik, Sangmi Moon, Bora Kim, Cheolhong Kim, Daejin Kim, and Intae Hwang</i>	
Optimal Wireless Aerial Sensor Node Positioning for Randomly Deployed Planar Collaborative Beamforming .....	5122
<i>Tan A. Ngo, Murali Tummala, and John C. McEachen</i>	
The Possibility of Wireless Sensor Networks for Industrial Pipe Rack Safety Monitoring .....	5129
<i>Jieun Jung and Byunghun Song</i>	
Totally-Ordered, Reliable Multicast over Cognitive Radio Networks .....	5135
<i>Matthew R. Tolson, Clark V. Dalton, Mark D. Silvius, Ethan S. Hennessey, Curtis C. Medve, Jared J. Thompson, Kenneth M. Hopkinson, and Seif Azghandi</i>	
Ubiquitous Interpersonal Communication over Ad-hoc Networks and the Internet .....	5144
<i>Edoardo Biagioni</i>	
Using Simulations to Study the Efficiency of Update Control Protocols .....	5154
<i>Bernd Pfitzinger, Tommy Baumann, Dragan Macos, and Thomas Jestädt</i>	
Vulnerability Analysis of LTE Location Services .....	5162
<i>Mark Hofer, John McEachen, and Murali Tummala</i>	
"'''Vtcenþpi "ý g'Hqy "qh'Mþpqy ngf i g'lp "K"Qti cpk cþkpu="Vj g'Ko r cev'qh"Qti cpk cþkpcn"Ngctpkpi "Hcevqtu"cpf "Rtqlgev"Ngctpkpi "Rtcevlegu"qp "Rtqlgev"Uweeguu"Ooooooooooooooo"3: 7" ""F qpcif "UO eMc{ "KK"Vlo qj { "LOGnku	

## Author Index