CEC 2010 Long Paper Sessions

Session 1: E-Commerce and Enterprise Architectures

A Flexible Schedule Reservation Scheme for Real-Time Service-Oriented Architecture .................................................................1
   Weiran Nie, Mark Panahi, and Kwei-Jay Lin

A Scalable Interoperability Architecture for Certified Mail Systems .................................................................9
   Arne Tauber and Thomas Rössler

Looking into a REST-Based Universal API for Database-as-a-Service Systems ....................................................17
   Till Haselmann, Gunnar Thies, and Gottfried Vossen

Session 2: E-Commerce Economics

Tâtonnement Mechanisms for Combinatorial Exchanges .................................................................25
   Shantanu Biswas and Y. Narahari

Enhancing Continuous Double Auction for Handling Homogeneous Goods in Online Auctions ................................................32
   Huiye Ma, Wenyan Hu, and Ho-fung Leung

A Manageable Small World for Collaborative Enterprises Social Network .........................................................40
   Shaohua Liu, Yinglong Ma, Tianlu Mao, Junsheng Yu, Siyu Liu, and Xiaodong Chen
Session 3: Business Process Management

Design-Time Process Optimization through Optimization Patterns and Process Model Matching ..................................................48
  Florian Niedermann, Sylvia Radeschütz, and Bernhard Mitschang
Advanced Migration Strategies for Adaptive Process Management Systems ..................................................56
  Stefanie Rinderle-Ma and Manfred Reichert
Towards Executing ebBP-Reg B2Bi Choreographies .................................................................64
  Andreas Schönberger and Guido Wirtz

Session 4: Models in E-Commerce and Enterprise Computing

A Document Model Management Framework Based on Core Components ..................................................72
  Michael Strommer, Christian Pichler, and Philipp Liegl
An MDE Approach to Design Enterprise Architecture Viewpoints ............................................................80
  Carlos Peña and Jorge Villalobos
On Model Checker Based Testing of Electronic Contracting Systems ..................................................88
  Abubkr Abdelsadiq, Carlos Molina–Jimenez, and Santosh Shrivastava

Session 5: Decision Support in E-Commerce

Mobile Product Browsing Using Bayesian Retrieval ..................................................................................96
  Christoph Lofi, Christian Nieke, and Wolf-Tilo Balke
Strategic Provider Selection in a Policy-Based Helping Scenario ..........................................................104
  Christian Hütter, Jing Zhi Yue, Christian von der Weth, and Klemens Böhm
Impacts of Decoy Effects on the Decision Making Ability ........................................................................112
  Erich Christian Teppan, Gerhard Friedrich, and Alexander Felfernig

Session 6: Security and Trust

Tackling Compliance Deficits of Data-Protection Law with User Collaboration - A Feasibility Demonstration with Human Participants ..................................................120
  Thorben Burghardt, Erik Buchmann, Klemens Böhm, Jürgen Kühling, Simon Bohnen,
  and Anastasios Sivridis
On Evolving Organizational Models without Losing Control on Authorization
Constraints in Web Service OrCHEstrations ..................................................................................128
  Stefanie Rinderle-Ma and Maria Leitner
Privacy-Preserving Outsourced Profiling ..................................................................................................136
  Debmalya Biswas, Stephan Haller, and Florian Kerschbaum

CEC 2010 Short Paper Sessions
### Session 7: Economic Issues

Customers’ Preferences for Infrastructure Cloud Services ................................................................. 144
*Arun Anandasivam, Philipp Best, and Simon See*

Enabling Cloud Service Reservation with Derivatives and Yield Management .................................... 150
*Thomas Meinl, Arun Anandasivam, and Michiaki Tatsumori*

Effects of Evaluation Information Disclosure in E-Commerce Systems .................................................... 156
*Koki Murakata and Tokuro Matsuo*

### Session 8: IT Issues in E-Commerce and Enterprise Computing

Managing the Quality of Modular Services — A Process-Oriented Aggregation of Expected Service Levels Based on Probability Distributions ................................................................. 162
*Clemens van Dinther, Rico Knapper, Benjamin Blau, Tobias Conte, and Arun Anandasivam*

Managing Workload Importance in Enterprise DBMSs ............................................................................ 168
*Baoning Niu, Yayan Xue, Patrick Martin, and Wendy Powley*

### Session 9: Knowledge Management

Ontology-Enabled Knowledge Management in Environmental Regulations and Incentive Policies: The ERIPAD System ............................................................................................................. 174
*Seog-Chan Oh, Xiang Zhao, Stephan R. Biller, Kisup Lee, Ho-Im Jung, Mye Sohn, and Heesang Lee*

Interactive Visual Analysis of Hierarchical Enterprise Data ...................................................................... 180
*Yu-Hsuan Chan, Kimberly Keeton, and Kwan-Liu Ma*

Sign-Based Semantics-Enriched Social Computing .................................................................................. 188
*Jingzhi Guo*

### Session 10: Privacy and Trust

TagPay: A Payment Atomic RFID Ownership Transfer Protocol ............................................................... 196
*Himanshu Pagey and Kien A. Hua*

Privacy in Service Oriented Architectures: SOA Boundary Identity Masking for Enterprises .................... 204
*B. Liver, R. Di Paolo, and K. Tice*

Mining and Composition of Emergent Collectives in Mixed Service-Oriented Systems ............................ 212
*Daniel Schall and Florian Skopik*

### Author Index

............................................................................................................................................................... 220