Table of Contents

Internet-Based Collaborative Work/E-Education

Helping E-Commerce Consumers Make Good Purchase Decisions: A User Reviews-Based Approach ........................................... 1
Richong Zhang and Thomas T. Tran

Using Instant Messaging Systems as a Platform for Electronic Voting ........ 12
Anastasia Meletiadou and Rüdiger Grimm

A Multi-criteria Collaborative Filtering Approach for Research Paper Recommendation in Papyres ........................................ 25
Amine Naak, Hicham Hage, and Esma Aïmeur

Industrial Experience

An Ontological Approach to Connecting SOA Implementations .......... 40
Wesley McGregor

A Non-technical User-Oriented Display Notation for XACML Conditions ................................................................. 53
Bernard Stepien, Amy Felty, and Stan Matwin

Goal-Driven Development of a Patient Surveillance Application for Improving Patient Safety ............................................. 65
Saeed Ahmadi Behnam, Daniel Amyot, Alan J. Forster, Liam Peyton, and Azalia Shamsaei

Global Location-Based Access to Web Applications Using Atom-Based Automatic Update ................................................... 77
Kulwinder Singh and Dong-Won Park

Inter-Organizational Processes I

Toward a Framework for Dynamic Service Binding in E-Procurement ................................................................. 89
Maryam Ashoori, Benjamin Eze, Morad Benyoucef, and Liam Peyton

Integrating Identity Management With Federated Healthcare Data Models ................................................................. 100
Jun Hu and Liam Peyton
Wrestling With a Paradox: Complexity in Interoperability Standards
Making for Healthcare Information Systems .......................... 113
Jeff Pittaway and Norm Archer

Open Source and Open Environments
Aligning Goal and Value Models for Information System Design .... 126
Ananda Edirisuriya and Jelena Zdravkovic
Model-Based Penetration Test Framework for Web Applications Using TTCN-3 ......................................................... 141
Pulei Xiong, Bernard Stepien, and Liam Peyton
Impact of Diversity on Open Source Software ......................... 155
Hiba Enayat, Steven Muegge, and Stoyan Tanev
Web Search Based on Web Communities Feedback Data ............. 169
Mehdi Adda, Rokia Missaoui, and Petko Valtchev

Inter-Organizational Processes II
Improving Trust and Reputation Modeling in E-Commerce Using Agent Lifetime and Transaction Count .............................. 184
Catherine Cormier and Thomas T. Tran
Towards a Methodology for Representing and Classifying Business Processes ................................................................. 196
Hafedh Milli, Abderrahmane Leshob, Eric Lefebvre, Ghislain Lévesque, and Ghizlane El-Boussaidi
Typing for Conflict Detection in Access Control Policies ............. 212
Kamel Adi, Yacine Bouzida, Ikhlass Hattak, Luigi Logrippo, and Serge Mankovskii

Short Research Contributions
Dynamic Pricing in Electronic Commerce Using Neural Network ... 227
Tapu Kumar Ghose and Thomas T. Tran
TwoStep: An Authentication Method Combining Text and Graphical Passwords .............................................................. 233
P.C. van Oorschot and Tao Wan
Design Principles for E-Government Architectures .................... 240
Alain Sandoz
A Proposed Intelligent Policy-Based Interface for a Mobile eHealth Environment .................................................. 246
   Amir Tavasoli and Norm Archer

Security and Trust

Verification of Information Flow in Agent-Based Systems .............. 252
   Khair Eddin Sabri, Ridha Khedri, and Jason Jaskolka

A Legal Perspective on Business: Modeling the Impact of Law ........ 267
   Sepideh Ghanavati, Alberto Siena, Anna Perini, Daniel Amyot,
   Liam Peyton, and Angelo Susi

A Requirement Engineering Framework for Electronic Data Sharing of
Health Care Data Between Organizations .................................. 279
   Xia Liu, Liam Peyton, and Craig Kuziemsky

Service-Oriented Architecture

An Aspect-Oriented Framework for Business Process Improvement .... 290
   Alireza Pourshahid, Gunter Mussbacher, Daniel Amyot, and
   Michael Weiss

Integration Testing of Web Applications and Databases Using
TTCN-3 ................................................................................. 306
   Bernard Stepien and Liam Peyton

A Reference Model for Semantic Peer-to-Peer Networks ............... 319
   Abdul-Rahman Mawlood-Yonis, Michael Weiss, and Nicola Santoro

Author Index ........................................................................ 335