

Communications
in Computer and Information Science 23

Joaquim Filipe Mohammad S. Obaidat (Eds.)

E-business and Telecommunications

4th International Conference, ICETE 2007
Barcelona, Spain, July 28-31, 2007
Revised Selected Papers



Springer

Volume Editors

Joaquim Filipe

Polytechnic Institute of Setúbal/INSTICC

Av. D. Manuel I, 27A - 2. Esq., 2910-595 Setúbal, Portugal

E-mail: jfilipe@insticc.org

Mohammad S. Obaidat

Monmouth University

Department of Computer Science

West Long Branch, NJ 07764, U.S.A.

E-mail: obaidat@monmouth.edu

Library of Congress Control Number: 2008939369

CR Subject Classification (1998): J.1, E.3, I.5

ISSN 1865-0929

ISBN-10 3-540-88652-4 Springer Berlin Heidelberg New York

ISBN-13 978-3-540-88652-5 Springer Berlin Heidelberg New York

This work is subject to copyright. All rights are reserved, whether the whole or part of the material is concerned, specifically the rights of translation, reprinting, re-use of illustrations, recitation, broadcasting, reproduction on microfilms or in any other way, and storage in data banks. Duplication of this publication or parts thereof is permitted only under the provisions of the German Copyright Law of September 9, 1965, in its current version, and permission for use must always be obtained from Springer. Violations are liable to prosecution under the German Copyright Law.

Springer is a part of Springer Science+Business Media

springer.com

© Springer-Verlag Berlin Heidelberg 2008

Printed in Germany

Typesetting: Camera-ready by author, data conversion by Scientific Publishing Services, Chennai, India
Printed on acid-free paper SPIN: 12549474 06/3180 5 4 3 2 1 0

Preface

This book contains the best papers of the 4th International Conference on E-business and Telecommunications (ICETE), which was held during July 28–31, 2007 in Barcelona, Spain. The conference reflects a continuing effort to increase the dissemination of recent research results among professionals who work in the areas of e-business and telecommunications. ICETE is a joint international conference integrating four major areas of knowledge that are divided into four corresponding conferences: ICE-B (International Conference on e-Business), SECRIPT (International Conference on Security and Cryptography), WINSYS (International Conference on Wireless Information Systems) and SIGMAP (International Conference on Signal Processing and Multimedia).

The program of this joint conference included several outstanding keynote lectures presented by internationally renowned distinguished researchers who are experts in the various ICETE areas. Their keynote speeches contributed to the overall quality of the program and heightened the significance of the theme of the conference.

The conference topic areas define a broad spectrum in the key areas of e-business and telecommunications. This wide view has made it appealing to a global audience of engineers, scientists, business practitioners and policy experts. The papers accepted and presented at the conference demonstrated a number of new and innovative solutions for e-business and telecommunication networks and systems, showing that the technical problems in these fields are challenging, related and significant.

ICETE 2007 received 418 papers in total, with contributions from more than 60 different countries, in all continents, which really shows the success and global dimension of the conference. To evaluate each submission, a double-blind paper evaluation method was used: each paper was reviewed by at least two experts from the International Program Committee, in a double-blind review process, and most papers received three reviews or even more. In the end, 175 papers were selected for oral presentation and publication, corresponding to a 41% acceptance ratio. Of these only 62 were accepted as full papers (15% of submissions) and 113 as short papers. Additionally, 99 papers were accepted for poster presentation.

We hope that you will find this collection of the best ICETE 2007 papers interesting, beneficial and an excellent source of inspiration and knowledge in this important area. ICETE is growing at an impressive rate both in terms of submissions and quality. We hope to have it as the main forum for all those interested in an integrative perspective of the areas of e-business and telecommunications, inter-relating knowledge on different theoretical and practical aspects of communication networks such as wireless information systems, security, signal processing and multimedia and e-business.

We hope that we have been successful at selecting these outstanding papers in this book as an important reference for researchers and developers.

August 2008

Joaquim Filipe
Mohammad S. Obaidat

Conference Committee

Conference Co-chairs

Joaquim Filipe
Polytechnic Institute of Setúbal / INSTICC, Portugal
Javier Hernando
Polytechnic University of Catalonia, Spain
Mohammad S. Obaidat
Monmouth University, USA

Program Co-chairs

Pedro Assunção	Polytechnic Institute of Leiria, Portugal (SIGMAP)
Rafael Caldeirinha	Polytechnic Institute of Leiria, Portugal (WINSYS)
Sérgio Faria	Polytechnic Institute of Leiria, Portugal (SIGMAP)
Eduardo Fernández-Medina	UCLM, Spain (SECRYPT)
Javier Hernando	Polytechnic University of Catalonia, Spain (SECRYPT)
Victor Peral Lecha	France Telecom R&D UK, UK (WINSYS)
Manu Malek	Stevens Institute of Technology, USA (SECRYPT)
David A. Marca	University of Phoenix, USA (ICE-B)
Mohammad S. Obaidat	Monmouth University, USA (WINSYS)
Boris Shishkov	University of Twente, The Netherlands (ICE-B)
Marten van Sinderen	University of Twente, The Netherlands (ICE-B)

Organizing Committee

Paulo Brito	INSTICC, Portugal
Marina Carvalho	INSTICC, Portugal
Hélder Coelhas	INSTICC, Portugal
Vera Coelho	INSTICC, Portugal
Andreia Costa	INSTICC, Portugal
Bruno Encarnação	INSTICC, Portugal
Luís Marques	INSTICC, Portugal
Vítor Pedrosa	INSTICC, Portugal
Vera Rosário	INSTICC, Portugal
Mónica Saramago	INSTICC, Portugal

ICE-B Program Committee

Ajith Abraham, Republic of Korea	Milena Head, Canada
Esma Aimeur, Canada	Nina Helander, Finland
Fahim Akhter, United Arab Emirates	Martin Hepp, Austria
Damminda Alahakoon, Australia	Vlatka Hlupic, UK
Antonia Albani, The Netherlands	Birgit Hofreiter, Australia
Sarmad Alshawi, UK	Andreas Holzinger, Austria
Panagiotes Anastasiades, Greece	Weihong Huang, UK
José Luis Arjona, Spain	Christian Huemer, Austria
Anteneh Ayanso, Canada	Patrick C. K. Hung, Canada
Gilbert Babin, Canada	Ali Hurson, USA
Ladjel Bellatreche, France	Arun Iyengar, USA
Morad Benyoucef, Canada	James Joshi, USA
Sourav S. Bhowmick, Singapore	Matjaz B. Juric, Slovenia
Hans Bjornsson, Sweden	Sherif Kamel, Egypt
Peter Bodorik, Canada	David Kreps, UK
Vesna Bosilj-Vuksic, Croatia	Anton Lavrin, Slovakia
Christos Bouras, Greece	Elaine Lawrence, Australia
Stephane Bressan, Singapore	Lundy Lewis, USA
Rongzeng Cao, China	Shuliang Li, UK
Barbara Carminati, Italy	Yinsheng Li, China
Malu Castellanos, USA	Chin Lin, China
Teuta Cata, USA	Tokuro Matsuo, Japan
Michael Chau, Hong Kong	Brian Mennecke, USA
Patrick Y. K. Chau, Hong Kong	Habib Mir Hosseini, Singapore
Kwok Wai Cheung, China	Adrian Mocan, Austria
Dickson Chiu, Hong Kong	Sabah Mohammed, Canada
Soon Ae Chun, USA	Carlos Molina-Jimenez, UK
Jen-Yao Chung, USA	Ali Reza Montazemi, Canada
Oscar Corcho, UK	Wee Keong Ng, Singapore
Alfredo Cuzzocrea, Italy	Georgios Papamichail, Greece
Aspassia Daskalopulu, Greece	Cesare Pautasso, Switzerland
Claudia Diaz, Belgium	Krassie Petrova, New Zealand
Timon Du, Hong Kong	Axel Polleres, Ireland
Schahram Dustdar, Austria	Pak-Lok Poon, Hong Kong
Jinan Fiaidhi, Canada	Ramayah T., Malaysia
Xiang Fu, USA	Dimitris Rigas, UK
George Giaglis, Greece	Michael Rosemann, Australia
Christos Grecos, UK	David Ruiz, Spain
Paul Grefen, The Netherlands	Jarogniew Rykowski, Poland
Volker Gruhn, Germany	Demetrios Sampson, Greece
Haresh Gurnani, USA	Detlef Schoder, Germany
Mohand-Said Hacid, France	Hossein Sharifi, UK

Quan Z. Sheng, Australia
 Miguel Soriano, Spain
 Mario Spremici, Croatia
 Katarina Stanoevska-Slabeva,
 Switzerland
 York Sure, Germany
 Thompson Teo, Singapore
 Vladimir Tasic, Australia
 Roland Traunmüller, Austria
 Tomas Vitvar, Ireland

Adam Vrechopoulos, Greece
 Krzysztof Wecel, Poland
 Michael Weiss, Canada
 Erik Wilde, USA
 Jongwook Woo, USA
 Lai Xu, Australia
 Benjamin Yen, Hong Kong
 Soe-Tsyr Yuan, Taiwan, R.O.C.
 Han Zhang, USA

SECRYPT Program Committee

Kamel Adi, Canada
 Gordon Agnew, Canada
 Jörn Altmann, Germany
 Joonsang Baek, Singapore
 Dan Bailey, USA
 Lejla Batina, Belgium
 Anthony Bedford, Australia
 Carlo Blundo, Italy
 Emmanuel Bresson, France
 Rahmat Budiarto, Malaysia
 Roy Campbell, USA
 Kim-Kwang Raymond Choo, Australia
 Edward Chow, USA
 Christophe Clavier, France
 Debbie Cook, USA
 Rui Costa Cardoso, Portugal
 Mads Dam, Sweden
 Paolo D'Arco, Italy
 Sabrina De Capitani di Vimercati, Italy
 Breno de Medeiros, USA
 José Neuman de Souza, Brazil
 Falko Dressler, Germany
 Orr Dunkelman, Belgium
 Iwan Duursma, USA
 Robert Erbacher, USA
 Eduardo B. Fernandez, USA
 Mário Freire, Portugal
 Steven Furnell, UK
 David Galindo, Spain
 Luciano Gaspari, Brazil
 Paolo Giorgini, Italy

Juan Gonzalez Nieto, Australia
 Carlos Goulart, Brazil
 Lisandro Granville, Brazil
 Stefanos Gritzalis, Greece
 Vic Grout, UK
 Javier Herranz, Spain
 Amir Herzberg, Israel
 Alejandro Hevia, Chile
 Min-Shiang Hwang, Taiwan
 Cynthia Irvine, USA
 Hamid Jahankhani, UK
 Christian Damsgaard Jensen, Denmark
 Willem Jonker, The Netherlands
 Dong Seong Kim, USA
 Kwangjo Kim, Republic of Korea
 Seungjoo Kim, Republic of Korea
 Paris Kitsos, Greece
 Cetin Kaya Koc, Turkey
 Steve Kremer, France
 Christopher Kruegel, Austria
 Ralf Kuesters, Switzerland
 Tanja Lange, The Netherlands
 Albert Levi, Turkey
 Yingjiu Li, Singapore
 Chae Hoon Lim, Republic of Korea
 Javier Lopez, Spain
 Olivier Markowitch, Belgium
 Alexander May, Germany
 Madjid Merabti, UK
 Ali Miri, Canada
 Atsuko Miyaji, Japan

Edmundo Monteiro, Portugal	Nicolas Sklavos, Greece
Haralambos Mouratidis, UK	Mario Spremic, Croatia
Yi Mu, Australia	Mark Stamp, USA
Volker Müller, Luxembourg	Aaron Striegel, USA
José Luis Oliveira, Portugal	Lily Sun, UK
Martin Olivier, South Africa	Willy Susilo, Australia
Rolf Oppliger, Switzerland	Michael Szydlo, USA
Elisabeth Oswald, UK	Tsuyoshi Takagi, Japan
Carles Padro, Spain	Ferucio Laurentiu Tiplea, Romania
Daniel Page, UK	Ambrosio Toval, Spain
Victor Peral Lecha, UK	Wade Trappe, USA
Günther Pernul, Germany	Wen-Guey Tzeng, Taiwan, R.O.C.
Luiz Carlos Pessoa Albini, Brazil	Ulrich Ultes-Nitsche, Switzerland
Raphael C.-W. Phan, Switzerland	Dominique Unruh, Germany
George Polyzos, Greece	Guillaume Urvoy-Keller, France
Joachim Posegga, Germany	Yongge Wang, USA
Atul Prakash, USA	Susanne Wetzel, USA
Indrakshi Ray, USA	Duminda Wijesekera, USA
Indrajit Ray, USA	S. Felix Wu, USA
Srinivas Sampalli, Canada	Chaoping Xing, Singapore
David Samyde, USA	Shouhuai Xu, USA
Aldri Santos, Brazil	Mariemma I. Yagüe, Spain
Susana Sargent, Portugal	Alec Yasinsac, USA
Damien Sauveron, France	Sung-Ming Yen, Taiwan, R.O.C.
Erkay Savas, Turkey	Meng Yu, USA
Berry Schoenmakers, The Netherlands	Moti Yung, USA
Bruno Schulze, Brazil	Fangguo Zhang, China
Alice Silverberg, USA	André Zúquete, Portugal

SIGMAP Program Committee

Karim Abed-Meraim, France	Amel Benazza-Benyahia, Tunisia
Driss Aboutajdine, Morocco	Abdellatif Benjelloun Touimi, France
Ralf Ackermann, Germany	Mohammed Bennamoun, Australia
J.K. Aggarwal, USA	Younès Bennani, France
Harry Agius, UK	Shuvra Bhattacharyya, USA
Abbes Amira, UK	Abdesselam Bouzerdoum, Australia
João Ascenso, Portugal	Liang-Gee Chen, Taiwan, R.O.C.
Jaakko Astola, Finland	Shu-Ching Chen, USA
Samir Attallah, Singapore	Naveen Chilamkurti, Australia
Oscar Au, Hong Kong	Ryszard S. Choras, Poland
Azeddine Beghdadi, France	José Alfredo Ferreira Costa, Brazil
Adel Belouchrani, Algeria	Rita Cucchiara, Italy

Aysegul Cuhadar, Canada	Rastislav Lukac, Canada
Eduardo da Silva, Brazil	Kai-Kuang Ma, Singapore
Antonio De Maio, Italy	Hong Man, USA
Petar M. Djuric, USA	Andreas Maras, Greece
David Du, USA	Andreas Mauthe, UK
Peter Eisert, Germany	Ajmal Mian, Australia
Abdulmotaleb El Saddik, Canada	Robin Morris, USA
Rob Evans, Australia	Antonio Navarro, Portugal
Sergio Faria, Portugal	Roeland Ordelman, The Netherlands
Wu-chi Feng, USA	Haldun M. Ozaktas, Turkey
Anibal Ferreira, Portugal	Montse Pardas, Spain
Marco Furini, Italy	Raffaele Parisi, Italy
Mathew George, USA	Luigi Paura, Italy
Theo Gevers, The Netherlands	Manuel Perez Malumbres, Spain
Z. Ghassemlooy, UK	Béatrice Pesquet-Popescu, France
Lorenzo Granai, UK	Athina Petropulu, USA
Christos Grecos, UK	Ioannis Pitas, Greece
Mislav Grgic, Croatia	Ashok Popat, USA
Patrick Gros, France	Maria Paula Queluz, Portugal
William Grosky, USA	Matthias Rauterberg, The Netherlands
Thomas Haenselmann, Germany	Giuseppe Ricci, Italy
Pål Halvorsen, Norway	Dimitris Rigas, UK
Peter Händel, Sweden	Roberto Rinaldo, Italy
Xian-Sheng Hua, China	Nuno Rodrigues, Portugal
Benoit Huet, France	Srinivas Sampalli, Canada
Jenq-Neng Hwang, USA	Shin'ichi Satoh, Japan
Jiri Jan, Czech Republic	Gerald Schaefer, UK
Philippe Joly, France	Raimondo Schettini, Italy
Joemon Jose, UK	Timothy K. Shih, Taiwan, R.O.C.
Chehdi Kacem, France	Wladyslaw Skarbek, Poland
Hari Kalva, USA	John Aa. Sorensen, Denmark
John Kender, USA	Tania Stathaki, UK
Hyoung-Joong Kim, Republic of Korea	Hari Sundaram, USA
Paris Kitsos, Greece	Dacheng Tao, Hong Kong
Stefanos Kollias, Greece	Qi Tian, USA
Yiannis Kompatsiaris, Greece	Jan Turan, Slovakia
Murat Kunt, Switzerland	Vesa Valimaki, Finland
C.-C. Jay Kuo, USA	Kainam Thomas Wong, Hong Kong
Pascal Larzabal, France	Marcel Worring, The Netherlands
Jeongkyu Lee, USA	Rong Yan, USA
Tayeb Lemlouma, France	Yuan Yuan, UK
Clement Leung, Australia	Habib Zaidi, Switzerland
Paulo Lobato Correia, Portugal	Zhengyou Zhang, USA
Fernando Lopes, Portugal	Cha Zhang, USA

WINSYS Program Committee

Imad Aad, Germany
Rui L. Aguiar, Portugal
Toufik Ahmed, France
Özgür B. Akan, Turkey
Salah Al-sharhan, Kuwait
Hakim Badis, France
Albert Banchs, Spain
Luis Bernardo, Portugal
Saad Biaz, USA
Luciano Bononi, Italy
Mohammed Boulmalf, United Arab Emirates
Rafael Caldeirinha, Portugal
Mihaela Cardei, USA
Claudio Casetti, Italy
Xiaodong Chen, UK
Hsiao-Hwa Chen, Taiwan, R.O.C.
Tibor Cinkler, Hungary
Iñigo Cuiñas, Spain
Alfredo Cuzzocrea, Italy
Merouane Debbah, France
Mischa Dohler, France
Christos Douligeris, Greece
Hesham El-Sayed, United Arab Emirates
Manuel García Sánchez, Spain
Mohammad Ghavami, UK
David Greaves, UK
Ibrahim Habib, USA
Richard Harris, New Zealand
Ramin Hekmat, The Netherlands
Mario Huemer, Germany
Youssef Iraqi, Oman
Eduard Jorswieck, Sweden
Andreas Kassler, Sweden
Michael Koch, Germany
Mladen Kos, Croatia
Yevgeni Koucheryavy, Finland
Srisankar Kunniyur, India
Wing Kwong, USA
Frank Li, USA
Qilian Liang, USA
Chin Lin, Taiwan, R.O.C.
Susan Lincke, USA
Antonio Liotta, UK
Justin Lipman, China
Pascal Lorenz, France
Antonio Loureiro, Brazil
Hsi-Pin Ma, Taiwan, R.O.C.
Kami Makki, USA
Stefan Mangold, Switzerland
Shiwen Mao, USA
Guoqiang Mao, Australia
Michela Meo, Italy
Enzo Mingozi, Italy
Daniele Miorandi, Italy
Nader Mir, USA
Klaus Moessner, UK
Tomoaki Ohtsuki, Japan
Luis Orozco-Barbosa, Spain
Mohamed Ould-Khaoua, Oman
Andrzej R. Pach, Poland
Ai-Chun Pang, Taiwan, R.O.C.
Victor Peral Lecha, UK
Dirk Pesch, Ireland
Edward Pinnes, USA
Andreas Pitsillides, Cyprus
Simon Podvalny, Russian Federation
Yi Qian, Puerto Rico
Nicholas Race, UK
Venkatesh Ramaswamy, USA
Peter Reichl, Austria
Cohen Reuven, Israel
Tapani Ristaniemi, Finland
António Rodrigues, Portugal
Michele Rossi, Italy
Jörg Roth, Germany
Jorge Sa Silva, Portugal
Muhammed Salamat, Turkey
Sana Salous, UK
Srinivas Sampalli, Canada
Brunilde Sansò, Canada
Hamid Sharif, USA
Khaled Shuaib, United Arab Emirates
Elvino Silveira Medina de Sousa, Canada

Cooklev Todor, USA
 George Tombras, Greece
 Rafael P. Torres, Spain
 Damla Turgut, USA
 Shahrokh Valaee, Canada
 Cesar Vargas-Rosales, Mexico
 Emmanouel Varvarigos, Greece
 Enrique Vazquez, Spain
 Dimitrios Vergados, Greece

Yu Wang, USA
 Kui Wu, Canada
 Chunsheng Xin, USA
 Lie-Liang Yang, UK
 Fei Richard Yu, Canada
 Gergely Zaruba, USA
 Hao Zhu, USA
 Weihua Zhuang, Canada

ICE-B Auxiliary Reviewers

Wael Hosny Fouad Aly, Canada
 Samuil Angelov, The Netherlands
 Claudia Canali, Italy
 Manuel Garcia-Solaco, Mexico
 Spadidakis Giannis, Greece
 Andreas Harth, Ireland
 Evans Jean, USA
 Yu (Cathy) Jiao, USA
 Peter Kelley, Australia
 José Luis Álvarez, Spain

Alex Norta, Finland
 Machigar Ongtang, USA
 Johannes Putzke, Germany
 Christian Schmitt, Germany
 Nina Schoenemann, Germany
 Khalid Sherdil, Canada
 Jochem Vonk, The Netherlands
 Yingxia Xu, China
 Maciej Zaremba, Ireland

SECRYPT Auxiliary Reviewers

Miguel Ángel Martinez Aguilar, Spain
 Johann Barbier, France
 Daniel J. Bernstein, USA
 Srdjan Capkun, Switzerland
 Aniello Castiglione, Italy
 Chien-Ning Chen, Taiwan
 Benoit Chevallier-Mames, France
 Chen-Kang Chu, Taiwan
 Wolfgang Dobmeier, Germany
 Stefan Dürbeck, Germany
 Pooya Farshim, UK
 Pantelis A. Frangoudis, Greece
 Flavio Garcia, The Netherlands
 Theodosios Garefalakis, Greece
 Carlos Gutiérrez, Spain
 Ayca A. Hintoglu, Turkey
 Xinyi Huang, Australia
 Takeshi Ishihara, Japan
 Ayse G. Karatop, Turkey

Izuru Kitamura, Japan
 Sébastien Kunz-Jacques, France
 Hsi-Chung Lin, Taiwan
 Shiao-Ying Lin, Taiwan
 Pierre Loidreau, France
 Giannis F. Marias, Greece
 Francisco Javier Lucas Martínez, Spain
 Barbara Masucci, Italy
 Norbert Meckl, Germany
 Jordi Nin, Spain
 Kazuto Ogawa, Japan
 Jean-Rene Reinhard, France
 Alfonso Rodríguez, Chile
 Rolf Schillinger, Germany
 Junji Shikata, Japan
 Nigel Smart, UK
 Masakazu Soshi, Japan
 Martijn Stam, Switzerland
 Eleftherios Stefanis, Greece

Toshiaki Tanaka, Japan
Jheng-Hong Tu, Taiwan
Frederic Valette, France
Joaquin Lasheras Velasco, Spain
Ivan Visconti, Italy

Bogdan Warinschi, UK
Bo-Ching Wu, Taiwan
Liu Yang, USA
Wanyu Zang, USA.
Fan Zhang, Singapore

SIGMAP Auxiliary Reviewers

Medha Bhargava, USA
Andrzej Buchowicz, Poland
Raquel Esperanza Patiño Escarcina,
Brazil
Inácio Fonseca, Portugal
Andre Gagalowicz, France
Shamim Hossain, Canada
Reinhard Klette, New Zealand
Bozena Kostek, Poland

Witold Malina, Poland
Alexandre Miege, Canada
Waldemar Rakowski, Poland
K.R. Rao, New Zealand
Andrew Rocznak, Canada
Andrzej Skowron, Poland
Jackson Gomes de Souza, Brazil
Jing Wang, USA
Wei Wang, USA

WINSYS Auxiliary Reviewers

Ana Vázquez Alejos, Spain
Josephine Antoniou, Cyprus
Pavlos Antoniou, Cyprus
Marcel Cavalcanti de Castro, Sweden
Christoforos Christoforou, Cyprus
Pablo Torio Gomez, Spain

Jonas Karlsson, Sweden
Jun Liu, USA
Paula Gomez Perez, Spain
Dimitrios D. Vergados, Greece
Dimitrios J. Vergados, Greece
Luca Vollero, Italy

Invited Speakers

Franco Davoli, University of Genoa, Italy
Santanu Dutta, nVIDIA Corporation, USA
Ivan Ivanov, SUNY Empire State College, USA
Kecheng Liu, University of Reading, UK
Mohammad S. Obaidat, Monmouth University, USA
Günther Pernul, University of Regensburg, Germany
Tony Shan, Bank of America, USA

Table of Contents

Invited Speakers

Pragmatic Computing – A Semiotic Perspective to Web Services	3
<i>Kecheng Liu</i>	
Utility Computing: Reality and Beyond	16
<i>Ivan I. Ivanov</i>	
A Novel Grid-Based Micropayment System for Heterogeneous Multi-party Accounting	30
<i>Manel Abdelkader, Noureddine Boudriga, and Mohammad S. Obaidat</i>	

Part I: ICE-B

Bidding Agents That Perpetrate Auction Fraud	57
<i>Jarrod Trevathan, Alan McCabe, and Wayne Read</i>	
A Platform for Mobile Service Provisioning Based on SOA-Integration	72
<i>Michael Decker and Rebecca Bulander</i>	
A Hybrid Data Mining Approach for Credit Card Usage Behavior Analysis	85
<i>Chieh-Yuan Tsai</i>	
Critical Success Factors of Internet Shopping: The Case of Japan	98
<i>Kanokwan Atchariyachanvanich, Hitoshi Okada, and Noboru Sonehara</i>	
An Adaptive Knowledge-Based Approach for Detecting Fraud across Different e-Government Domains	110
<i>Panos Alexopoulos, Kostas Kafentzis, Nicholas Athanasiadis, Xanthi Benetou, Tassos Tagaris, Carol Jollie, and Panos Georgolios</i>	

Part II: SECRYPT

Timing to Block Scanning Malwares by Using Combinatorics Proliferation Model	125
<i>Kazumasa Omote, Takeshi Shimoyama, and Satoru Torii</i>	

Securing Biometric Templates Where Similarity Is Measured with Set Intersection	139
<i>Daniel Socek, Vladimir Božović, and Dubravko Ćulibrk</i>	
Score Equalization in SVM Multimodal Fusion for Person Recognition	152
<i>Pascual Ejarque and Javier Hernando</i>	
Remote Algorithmic Complexity Attacks against Randomized Hash Tables	162
<i>Noa Bar-Yosef and Avishai Wool</i>	
Securing Real-Time Sessions in an IMS-Based Architecture	175
<i>Paolo Cennamo, Antonio Fresa, Maurizio Longo, Fabio Postiglione, Anton Luca Robustelli, and Francesco Toro</i>	
IPSec Database Query Acceleration	188
<i>Alberto Ferrante, Satish Chandra, and Vincenzo Piuri</i>	
Detection of Spoofed MAC Addresses in 802.11 Wireless Networks	201
<i>Kai Tao, Jing Li, and Srinivas Sampalli</i>	
K2 Stream Cipher	214
<i>Shinsaku Kiyomoto, Toshiaki Tanaka, and Kouichi Sakurai</i>	
Two Types of Key-Compromise Impersonation Attacks against One-Pass Key Establishment Protocols	227
<i>K. Chalkias, F. Baldimtsi, D. Hristu-Varsakelis, and G. Stephanides</i>	
Reliable Intersection Computation within Malicious Environments	239
<i>Stefan Böttcher and Sebastian Obermeier</i>	
A Security Hardening Language Based on Aspect-Orientation	254
<i>Azzam Mourad, Marc-André Laverdière, and Mourad Debbabi</i>	

Part III: SIGMAP

Facial Expression Synthesis and Analysis	269
<i>Hao Wang</i>	
Multi-sequence H.264/AVC Rate Control Based on the Linear Model ...	284
<i>Grzegorz Pastuszak and Andrzej Pietrasiewicz</i>	
Non Parametric Stochastic Expectation Maximization for Data Clustering	293
<i>Gilles Bougenière, Claude Cariou, Kacem Chehdi, and Alan Gay</i>	
Mapping Phonetic Features for Voice-Driven Sound Synthesis	304
<i>Jordi Janer and Esteban Maestre</i>	

The MiSPOT System: Personalized Publicity and Marketing over Interactive Digital TV	315
<i>Martín López-Nores, José Juan Pazos-Arias, Yolanda Blanco-Fernández, Jorge García-Duque, Ricardo Tubío-Pardavila, and Marta Rey-López</i>	
Knowledge Engineering Aspects of Affective Bi-Modal Educational Applications	328
<i>Efthymios Alepis, Maria Virvou, and Katerina Kabassi</i>	

Part IV: WINSYS

Design of a Password-Based EAP Method	343
<i>Andrea Manganaro, Mingyur Koblenksky, and Michele Loreti</i>	
Bit and Power Allocation Strategies for OFDM Systems over Time-Varying Channels	356
<i>Xiang Gao and Mort Naraghi-Pour</i>	
Mobile Applications to a Pervasive World	371
<i>Hiata Anderson de Oliveira Coelho and Ricardo de Oliveira Anido</i>	
Multi-service Networks: A New Approach to End-to-End Topology Management	384
<i>Anne-Marie Bosneag and David Cleary</i>	
Author Index	397